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Current Notes

Vol. 8 No. 5

June 1988

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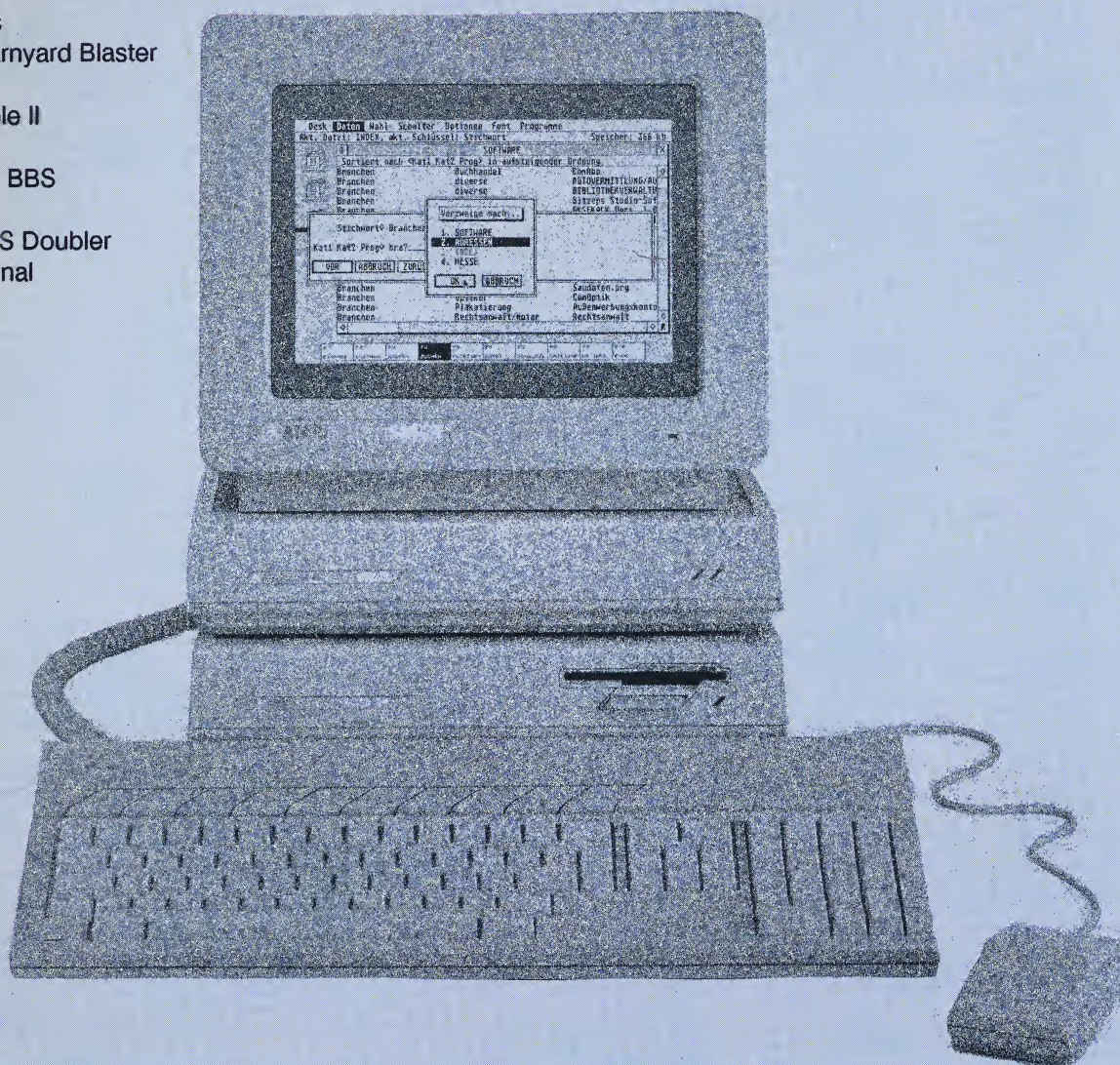
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SPECIAL REPORT:

- ☞ The HP "DeskJet" Ink Jet Printer
- ☞ GOE--Desktop Environment for the Atari 8-bit.



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Jerry Pournell, Byte Magazine, October 1987

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Charlie Young, ST World, July 1987

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Donna Wesolowski, ST Informer, August 1987

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June, 1988

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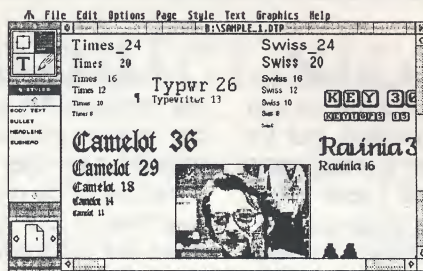
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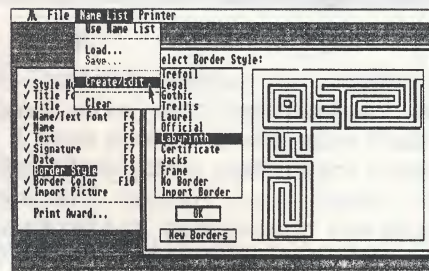
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This is our second "All-Atari" issue. As you can see, we have done some more fine-tuning this month. I don't know how it will look when it is printed, but the master copy, rolling off the Atari Laser on special paper for camera-ready masters (Hammermill Laser Plus), looks very good indeed. As I flip through these pages, I am reminded of a recent TV commercial. Perhaps you've seen it.

You and your colleagues have just handed your final report to a potential new client. (The report looks amazingly like this issue of *Current Notes*.) The client is pleased, but at the same time disappointed and concerned. He says, "Hey, this is great. But you promised to keep all of our information secret. It's obvious that you called in typesetters, artists, printers, and what have you to produce this report."

You respond, "But we didn't call in anyone. That whole report was produced by Joe, here, sitting at his desk using his computer." With a look of astonishment, they reply, "Wow! What kind of a computer does work like this?" You coyly reply, "Hire us and we'll tell you." Just imagine their astonishment when they hire you and you tell them an Atari produced the report!

Yes, an Atari desktop publishing system produced this issue of *Current Notes*. It included the Atari Mega ST4, the Atari SLM804 laser printer, and, the most important ingredient, Timeworks *Publisher*. If I had not committed to Atari hardware, I could have produced a perfectly good issue of *Current Notes* months ago by using the Atari Mega (or 1040ST for that matter), coupled with a postscript laser printer and Soft Logik's *Publishing Partner*. Again, the key ingredient in that combination would have been, not the computer, nor the printer since any postscript printer would do, but rather the software that made it possible.

If you take away *Publisher* from my current hardware configuration, Atari would have no viable desktop publishing alternative. Indeed, with only the poor Diablo emulator provided by Atari, the Atari laser can't even reliably be used as a printer.

In fact, in every area where the Atari ST computers are doing fine—music, graphics, word processing, computer-aided-design, programming languages—the reason is because of efforts by third party software vendors. The ST is easily the most versatile computer on the market. It has a large number of programs available running under its own GEM interface. If users, however, prefer a Unix or MS-DOS style environment, there are shells that run on the ST and simulate those environments. Only the Atari ST can run its own programs as well as Macintosh and IBM programs. The Macintosh emulation is courtesy of Dave Small. The IBM emulation is courtesy of Bill Teal. Neither of these developers had anything to do with Atari, nor did Atari lend them any assistance.

I'm pointing out what many of you already know is the obvious. No computer is going to get anywhere in the market without software, good software. Atari can manufacture the hardware. They can offer it at an attractive price (remember their slogan, "Power without the Price.") But nobody will buy Atari hardware unless there are programs available for that hardware.

I know that. You know that. But, does Atari know that? Jack Tramiel has often been quoted as saying "Business is War!" The aggressive pricing of the Atari line is clearly his most potent weapon in that war. But who is the enemy?

Atari's reputation among software developers is dismal at best (have any of you actually seen the ST "developer's kit" that Atari provides?). Atari's marketing program has been a complete and utter shambles and few Atari dealers have kind words to say about the company. Atari's recent announcement that they will no longer sell through distributors means that dealers, who have established credit lines with their local distributor, now must order direct from Atari. And, since business is war, Atari demands that everyone pay cash up front.

Atari owners are perhaps the luckiest of the lot since they got these wonderful computers at great prices. But, they've gotten their computers from their local Atari dealers and the software that makes the machines shine, from third party software developers. Atari Corporation has yet to evidence any interest in owners of Atari computers once they have purchased their machine.

It's clear that if Atari succeeds, Atari dealers, Atari software developers, Atari owners, (and *Current Notes*, too), will also succeed. But Atari cannot succeed by itself. It should not declare war on its friends. To do battle in this chaotic microcomputer marketplace, you need allies. Atari must strengthen its dealer network (and it can't afford to do that by cutting off any of their current dealers). It must also strengthen ties with software developers and Atari users. It is not enough for Atari to make profits. Atari dealers and Atari developers must also be able to make profits. Otherwise both groups will be forced to diversify their risks and move on to other computers besides Atari.

Well, enough Atari-bashing for awhile. You watch. With a little help from their friends, Atari will get their act straight. In the meantime, let's look at some of the good news on the Atari front. 8-bit owners will soon have their own desktop, see the interview with Merrill Ward (note, by the way, that this breakthrough did not originate with Atari.) All Atari owners will be interested in reading about the new HP DeskJet printer—the "poor" man's laser printer. There are five pages in this issue printed with the DeskJet. See if you can find them. (Answers on page 74, but don't peek.)

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More STAR WARS....

Dear Current Notes,

The 'SDI Computing, Star Wars and the ST', by Chris Anderson made me so mad that I am going to have to write a letter to complain. The rest of the April *Current Notes* is pretty good, so since I am writing ... I might as well say some nice things, too.

First of all, Chris Anderson's article. Why are you subjecting me to such nonsensical mumblings. What after all does he say? All his article amounts to is a poorly conceived political diatribe. I buy your magazine because it discusses the far-ranging possibilities of ST computing, not political indoctrination.

Let's be honest. Why is Chris Anderson writing? Because he thinks artificial intelligence is a dead end? Because he thinks people are wasting their time on neural networks? No. He is motivated to write by political beliefs about high tech warfare. His comments would go over fine in a "no nukes" meeting. He talks in the same condescending tone.

What makes him so superior? Why does he get to tell David Small and your readers that they are wasting their time with childish fantasies? He hasn't told me anything new. He hasn't piqued my interest about a new line of thought.

What he has done is get a "can't be done" article in your magazine. If you want a real good "can't be done" article, go hire a Macintosh user to write a few "future of Atari ST" articles.

I am more than a little tired of putting up with these people who advise us all to put our heads in the sand. Intercontinental ballistic missiles can be intercepted and destroyed. It has been done more than once by our own scientists. Satellites can be destroyed in space. The Russians have long had that capability. Reduction of a Russian first strike's effectiveness can be

accomplished, look at the concern the Russians show about our SDI program.

His article is political, not technical. It does not belong in your magazine.

Now, on to more pleasant topics.

I really enjoyed the TOS/2 article. (Now that is something far fetched.) There is no doubt in my mind that the operating system of the Atari ST needs upgrading. There are so many improvements individual programmers have already created for the ST, i.e. more colors, better dialog windows, Turbo ST, etc., etc. Keep pushing for an operating system upgrade. More discussion of unix would be nice, too.

Also, I liked the "Latest News in the ST World." I have been reading stories about the *WordPerfect* crisis on the BBS. It was nice to get a wrap-up story on it.

The OSS article was great. As a Personal Pascal user, I took a personal interest in the comments.

As always, the David Small article was wonderful. I find his articles worth the price of the magazine itself. You have a very unique asset in David. I know of no other developer with his literary skills. Give him a raise. Syndicate his articles. Now, if you could only get Sam Tramiel to write a monthly article with a blow-by-blow account of the blitter chip fiasco.

I skimmed over the *Microsoft Write* and *Tanglewood* articles. I appreciate the articles about things that don't work...I drop them from my list of things to buy, but I don't read them.

The *Cyber-Paint* article was interesting. My kids use *Flicker*, so now I have a reference point for Cyber-paint. By the way, I like your open-minded references to other ST magazines. An article on the best program published by ST magazines would be interesting.

The *Ultima 4* article made me want to get a copy. My kids are working on solving *Dungeon Mas-*

ter. After about a month of constant play they are both down on level 11 or 12. All *Dungeon Master* hints are warmly accepted.

Well, this rambling letter has to end somewhere, so it might as well be here. Thank you for putting together such an informative magazine.

Mark M. Mills
Dallas, Texas

[My first reaction to Chris's article was somewhat similar to yours, but on a second reading I thought there certainly was a computer-related message there (although the connection to the ST was tenuous at best). The viability of SDI is, of course, a hotly debated issue. Chris has put forth one view and you have countered with another. (Indeed, even Dave Small has some words to contribute to the subject this month.) Now, I am inclined to follow your suggestion and let that debate continue in other forums. Current Notes will keep it's focus on Atari.]

April Fool?

Dear Current Notes:

Har de har. Very funny, boys. I have to admit you guys had me going there for a few minutes, until I remembered what month it was.

I always look forward to the April issues to come out, and the "gag" articles the editors always try to sneak in. Last year an ST magazine (don't recall which one) had a picture of a Sony compact disk with a ribbon cable stuck in the side, pretending it was the new CD-ROM. I had some difficulty convincing some of the local ST'ers that it was not on the level.

But your April "guest editorial" had that one all beat! (I did get the issue kind of late in the month, so it caught me off guard a little, I guess.) But imagine a "Computer-bashing" article, berating the ST, in

an ST magazine! And endorsed as "eloquently expressed" by the editor himself!

When I got to the local ST store, one of the salespeople was reading it and grousing about this "attack". I didn't get to read it until I got home; wait till I see him again! Will I give him a hard time. Can't blame him too much, though. I thought it was serious too, until I saw some of the comparisons.

First, let's compare it to the AT. And the ST's graphics to 256K EGA or even the VGA. Never mind that such a system costs about \$2,500 compared to the ST color system at under \$1,000. An "Ultimate EGA board with monitor" goes for \$869 in *PC Week*. That's almost as much as a whole ST color system! Or let's compare TOS to OS/2; that'll be fun! Who is this "eloquent" editorialist who doesn't know that *WordPerfect* is available for the ST, but thinks that OS/2 is available? My definition of a "real operating system" includes it being on the shelves, and as far as I have been able to determine, OS/2 is still in the offing.

I got a real chuckle out of the "multitasking" and Windows issues, too. The ST hasn't got either at the start of the article, but by the end....well, the current GEM is "quite suitable for multitasking" and Megamax's new Laser C will do windows after all.

And let's not forget the statement that the ST "is roughly at the same stage IBM was at when it released the AT"! The XT was already a stable in the business community, which was then waiting for a more powerful version. The ST is only beginning to be recognized as the powerful system it is. Atari would go under in a heartbeat if they tried to introduce a 25mhz 68020 at this stage. Besides a few power-hungry hackers with money to burn (I'd say about \$4,000-\$5,000 minimum), who would they sell them to?

The final howls were at the end, when he also started berating the PS/2 models. This is a \$12,000+ system with one user (model 80)! I

can see why he might not like it—he's probably comparing it to a Cray 2 (\$17+ million)!

I kept waiting for the punchline and never came across it, but maybe it was just that understated humor editors are so good at. But thanks for all the chuckles anyway, guys. Man, I can't wait till next year!

James W. Alder

WordPerfect and Clocks

Dear Joe,

I just received my March issue of *Current Notes* today, and I wanted to make a couple of comments, along with ordering from the ST Library.

First of all, I find I sit down immediately and read the whole magazine right through. Of course, that does not include the XE pages, since I never owned one, and they have no meaning for me. Then, I find that repeatedly over the next couple of weeks, I am sitting down, or lying in bed at night re-reading some of the articles. I subscribe to a couple of other computer magazines, but this is the one I find myself coming back to time and time again.

Secondly, I have really enjoyed the various articles over the two years I have been a subscriber. In the last couple of issues, I have particularly enjoyed Dave Small's articles. He does a good job of writing, which is not always true of computer types.

Thirdly, I hope you will continue with the sort of magazine that it is. I hope you will continue to serve the ST (and the 8-bit) community.

I have been using *WordPerfect* for a while now, and find that the more I use it, the better it becomes. I have gone through several issues, and the one I am using at the present is the 1/29/88 issue. It seems (to me anyway) that the vast majority of the bugs have been

ironed out. There is one small one that bothers me, and that relates to the clock card I use. I have a Logikhron cartridge, and *WordPerfect* only recognizes the correct date if I use *STAccounts* first. I have written to Jeff Wilson about it, and he said that they are aware of this little problem. This leads me to the question I was wanting to ask. Are you thinking of a short article on "add-on" clocks for the ST? I know I would appreciate one, and perhaps another dealing with some of the internal matters, such as the various locations date and time are stored, and why.

P.B. Long
Oshawa, Ontario

[Well, clocks anyone? In fact, I'm sure many of our readers would like more info on hardware tinkering in general. The problem is finding someone who can handle a key-board as well as a soldering iron. If any of our readers would like to give it a shot, give Frank Sommers or Len Poggiali a call.]

Is CN Going to the Dogs?

Dear Joe,

I would like to make a couple of comments on *Current Notes*. Given the large amount of time you spend on the publication, and the fact that it is getting better every year, I really hesitate to criticize. But I have finally decided to take pen in hand (bit bucket in keyboard?) to pass along some comments and suggestions. I would point out that I deal in several computing worlds, mainframe, super computers, workstations, pc's and clones, and finally my 130XE. So, I see computers from a variety of aspects.

Clearly Atari is at fault for much of the complaints that arise about piracy. Why, one might ask. Well, they are pushing the low end market where quality doesn't count. The article by Frank Sommers comments that WP suffered loss of

revenue due to piracy. Not necessarily true. People get copies of programs to try before making a purchase. But the important difference is that for serious users, information and documentation is important. Such is virtually never forthcoming from Atari, and certainly they do not encourage it of the 3rd party software vendors. Why? Because they are still dealing with the neophytes and other "cheap" users. To such people, time is free and if a copy of a program doesn't work, so what? To me it is important.

The other side of the coin, however, is that I expect programs to work. I am sorely tried by the disclaimers that the software to be purchased is not even warranted to work. Think about it. That's the statement on the notice on software packages. It occurs very frequently with Atari software. Some companies won't even make a refund if the stuff doesn't do what it purports to do. I do pay for software, and I am offended by this. It also happens in the IBM world, but it does not seem to be as frequent. As a final insult, one then has to pay for fixes.

Is "going to Apple Computers" anything like "going to the dogs?" This is a quote from Roy Brooks in the April issue. I use this as an introduction to English grammar, spelling and punctuation. *Current Notes* does not do very well in this regard. To be very emphatic about it, the first sentence in this paragraph is punctuated **correctly**. *Current Notes* (you) get this wrong every time. *Current Notes* has the potential for becoming a dominant magazine in the computer world, especially if the ST's sell better and Atari supports them in a style to which they should become accustomed. But it will never be taken seriously with typos, incorrect punctuation and spelling errors. That is the most important function of an Editor, namely making the magazine look good.

As a matter of definition, "clean ASCII text" has a carriage return/line

feed combination at the end of each "line." That is the ANSI definition of a record!!!! *WordPerfect* does it correctly. This is a comment on the article by Milt Creighton.

Mnemonics is the correct spelling for that word, not pneumatic as in the article by John Marable in the March issue. The latter refers to control by air.

OK, enough said, keep up the good work. I don't really use my Atari equipment so much anymore, but I continue to read *Current Notes* to keep up on what is happening in the Atari world. For the present, Atari computers have no credibility in the business world. But who knows, with a working Transputer and real support miracles could happen.

Walter W. Jones
Gaithersburg, MD

Bombs Away!

Ever wondered what those TOS error messages and 'bombs' on your monitor signified? Below is a letter, originally written by Darryl May, that John Townsend of Atari posted on GENie in January to provide some answers.

Dear ATARI Customer,

The following is an official list of the errors that can appear while you are operating your ST computer. This first list gives you the GEM error messages:

Error description	GEM Error Codes
OK (No error)	0
Fundamental error	1
Drive not ready	2
Unknown command	3
CRC error	4
Bad request	5
Seek error	6
Unknown media	7
Sector not found	8
No paper	9

Write fault	10
Read fault	11
General error	12
Write protect	13
Media change	14
Unknown device	15
Bad sectors on format	16
Insert other disk	17
Invalid function number	32
File not found	33
Path not found	34
No handles left	35
Access denied	36
Invalid handle	37
Insufficient memory	39
Invalid memory block address	40
Invalid drive specified	46
No more files	49
Range error	64
Internal error	65
Invalid program load format	66

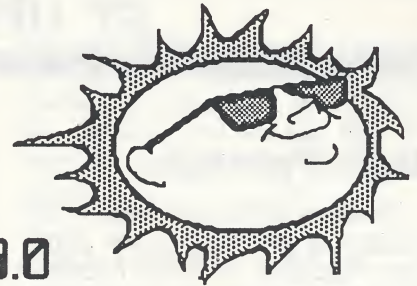
Those bombs that appear on your screen are error messages from the 68000 micro-processor.

Description	Number of Bombs
Reset: Initial PC2	1
Bus Error	2
Address Error	3
Illegal Instruction	4
Zero Divide	5
CHK Instruction	6
TRAPV Instruction	7
Privilege Violation	8
Trace	9
Line 1010 Emulator	10
Line 1111 Emulator	11
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Tech Specialist

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Magic Package

Readers of the last issue of CN sensed our enthusiasm for Timeworks *Publisher ST*. CN's Publisher touted it in his editorial. This column gave it our "Hats Off Award." As the last issue went to the printer, a couple of Hewlett-Packard DeskJets turned up in the hands of CN author's. Jeff Greenblatt, Magic Sac columnist, began testing it with *Publisher ST* and various Macintosh drawing programs. Jim Wallace, last months "Whiz-ee-Wig" writer, had been using it with *Easy Draw*. Both authors were enthusiastic.

Our own enthusiasm turned to excitement when we envisaged a DTP package that might be as little as a third the cost of Mac or IBM setups and of equal or higher quality. How was this possible? Well, the current DTP for the ST costs about \$4,500. That gives you a Mega ST4, an Atari SLM804 laser printer, and Timeworks *Publisher*. While somewhat limited in font selection and scaling, the quality is superb and it is just as fast as PostScript on a standard laser printer.

But at four grand plus, even though it is half the cost of the other systems, it isn't exactly a magic package. Cut that four back to less than two and Merlin begins to appear on the screen. With the DeskJet, discounting for about \$700, and a straight 1040 ST or a 520 ST upgraded to 1 meg, and you are well under \$2,000. You don't need the memory of the Mega's because the DeskJet functions just as a dot matrix printer did with the ST, but only with an astounding increase in resolution, from 180 dots to 300 dots per inch. And you can't tell the difference between the quality of the laser and the DeskJet.

Quick arithmetic tells you that Hewlett-Packard, already engaged in a mammoth ad campaign to establish its printers at or near the top of the market, will probably sell 200 DJ's for every Atari laser sold. If

the price and performance are right and they are, the ST should hook up with the DeskJet, pick up speed and get out there and up front with its rich relatives.

A New Driver

There is one glitch, however, although it might be rectifiable. While the Atari laser and the Mega, using the Mega's memory and streaming the data out the DMA port into the waiting maw of the printer, can do a page in less than two minutes, sometimes even 30 seconds, the DJ and *Publisher ST* take almost 10 minutes. But it is using a make shift driver, the one for the Hewlett-Packard Laser Jet II. A customized driver could knock that time down by a third.

A quick call to Timeworks. With missionary zeal and smoke curling out of our nostrils, we thought we might even talk Timeworks into designing the driver right now!

After several minutes of exploring the topic and comparing times, my magic package began to unravel. First, Timeworks licenses its drivers from Digital Research, primarily so that they will be compatible with the major printers on the market and maintainable. Unless Digital Research felt the project warranted writing a new driver, or unless Hewlett-Packard felt they had part of a winning package and negotiated with Digital Research or wrote the driver themselves, it was not likely to come soon. Would or could Timeworks energize the situation? Possibly, but there was some question of how much faster a page could be printed. There were limits to how fast you could turn out a high resolution bit-mapped page through the normal ports on an ST or any other printer. Without PostScript, it was unlikely the time could be dramatically reduced. With PostScript, the Magic Package falls apart at the price seams (normally a \$2,000 licensing fee per computer is required).

The Dream Fades

So for now, it seems that an under-\$2,000 DTP rig is out, out that is if you want more than several pages produced at a sitting; say a newsletter or a magazine. *Publisher ST* is still a standout product. Hewlett-Packard's DeskJet is equally remarkable. But our visions of HP putting DJ, *Publisher ST* and a 1040 ST together and showing them off in color in magazines and on TV as the Price Worthy Package of the DTP world fade for the moment.

Software

CEP--Chicago was the scene in late April of the Corporate Electronic Publisher's Show, where we suggested last month they might show a PostScript software clone for the Atari laser printer. Apparently they are waiting for a bigger occasion. No clone.

But *Publishing Partner Professional* was being demonstrated, with promises that it would be available in five weeks, circa 1 June. It was described "as worth every penny they may ask for it...really astounding...". When asked what the most "astounding" feature was, the reply, "a page of graphics in 45 seconds, and not just a pre-cooked demo page", did catch our attention. *Calamus*, one of the other purported DTP marvels, was doing its pages in 13 seconds, but they were mostly text and it was clearly still very much a Beta test of the program, which will be marketed by ISD of Canada, the same people who bring you the spreadsheet, *VIP Professional*.

Word Perfect Corp. was also there in all its finery, announcing that their support for the ST was undying and that work was going forward on *WordPerfect* version 4.2 (indexing and graphics) and 5.0 (more power with multi-new commands), but it was unlikely either would be out before next year.

UNIX On The ST

Whither Paperclip--Those of you who waited for the 8 bit wonder of the word-processing world, *PaperClip Elite*, and who agonized when Batteries Included was sold into oblivion, with rights and warehoused product to Electronic Arts, hoping PCE might still see the light of day, wait no more. It will, but for Commodore 64/128 as *PaperClip Publisher*, and possibly in name only.

A PD Mighty -- *Gulam* is a UNIX shell. It's distinction is that without having full blown UNIX on your ST, *Gulam* is as close as you can get. It also has a built in MicroEMAC.

A Migraph DJ Driver--While Data Research and the others may not, Migraph will, or rather has, put out a GDOS printer driver for the HP DeskJet printer and *Easy Draw*. Migraph is currently selling the driver bundled with its program and the DeskJet. The driver is also available separately for \$49.95. Per Jeff Greenblatt, it is "considerably" faster than DJ and *Publisher ST* in turning out a page of graphics and pretty words.

From 8 TO 16--Electronic Arts has stepped forward to help 8-bit'ers cross the bridge to ST land. 8-bit users can now upgrade their software to ST use by sending in the manual cover from the original 8-bit software and \$\$ equaling 1/2 the cost of the 16-bit version (for more info dial 800-562-1112 weekdays).

Gameware--The pot is still boiling with new arcade games, adventures, and flashy graphics for your ST. A true blue from yesteryear is *Battleship*, the game we all played with scratch paper and pencil, firing our 10 shots at our opponents ships hidden in a hundred square grid. It then graduated to plastic boards and flickering lights, but now its here in blazing, blasting color and sound, and well done, indeed. *Jump Jet* gets you off the water and into the air. *Tour-nament of Death* takes you into the dark castle to fight your way to the tower room to save the fair damsel,

and fight like a Trojan you must. *Deflector* does just what it says, forcing you to deflect your shots off mini-reflectors to hit targets. Psynosis has tried to better its successful *Barbarian*, where you went through cave after descending cave of stunning graphics to find and smash "The Crystal", with a new version staged in the interstices of a space ship. The action is the same and the quality of the graphics hard to top. *Prime Time*, a strategy game, has you running your own NBC television station, or maybe CBS, fighting the problems of prime time scheduling and ad pricing to make you Mr. Number One. For the cerebral, *Brain Box* and *Scruples*; for the macho, *Leatherneck* and *Inforcer*. *Music Studio 88* is out there for the midi crowd. *Impossible Mission II* is reviewed in full in this issue of CN.

Hardware

Comfortable?--That's what you ask when you turn your head away from the small round window of your airplane on its way to San Francisco and look down at the seemingly large backlit super twist liquid crystal screen of your ST Laptop Computer. Yes, there it was, causing a stir of excitement at the Hannover fair. How soon? Before or after the Abaq? If we had to guess, we'd say before, but a guess is all it would be. Some of you may remember Tramiel's venture into laptops with the Commodore 64. It apparently was a minor "disaster." But "the numbers" now testify that the demand for laptops is surging. However, they, too, require chips, and we all know about that problem.

Waiting For Paradox--After the unfortunate release of the software emulator for the IBM, word began to circulate that PARADOX was building a box to end all boxes for the IBM. That was a year ago or so. Now finally, for \$450 the box is almost ready. Expensive? Yes, unless you want to pay several hundred more for your IBM clone. This external box is designed to attach to your ST, accept all IBM cards

and run all IBM software, because, in fact, it is one. However, given PARADOX's previous performance, we will wait until we see this product in action before placing our order!

And The Winner Is...

Hacker and Hams--Presumably all of you ham radio operators who were seduced by computers, or those of you who started as hackers and now also QRX of an evening, unless you read CQ Magazine you may not know there is an Atari ham radio network out there. The newsletter is AD ASTRA, c/o Gil Frederick - VE4AG, 130 Maureen St., Winnipeg MB, Canada R3K 1M2.

Best of '87--Several months ago, Software Publishers Association gave out its Oscar awards. The occasion was a black-tie Academy Awards-style dinner. The awards?

Software Publishers Association's Excellence in Software, based in Washington, chose to have its dinner at the Claremont Hotel in Oakland, CA. Almost half of the awards went not to IBM but to the Mac. For those of you who take pride in never having "touched" a game, note that only 33 percent went to games and entertainment software. Less than half, but still the lion's share went to business software; educational programs garnered 20 percent of the award "statues."

That said, did the ST have any programs awarded that it could recognize? How about the "Best Adventure or Fantasy Role Playing Program", *Leisure Suit Larry* from Sierra On-Line. (It also runs on the IBM, Apple II, and Macintosh; interestingly, the award forgot to mention that it runs on the ST, first and foremost, no.)

Did the ST, or software that runs on it, hit any of the other awards? Best simulation, best action, and best technical achievement went to *Falcon*, a simulation of F-16 jet fighters from Spectrum Holobyte. Do you have it? The "Best Utility" and "Best Add-On" went to *Focal Point*, a desktop

manager plus by a computer journalist, Danny Goodman. Ever heard of him? "Best User Interface" was also written by him, a HyperCard program for the Mac called *Business Class*. The best productivity program went to *Macintax*, obviously for the Mac, but closely seconded, in the minds of some of us, if not the judges, by the ST's *Tax Advantage*. Sadly, the ST music niche wasn't recognized either. The best "entertainment" program award went to *Jam Session* from Broderbund, described as the best new use of a computer and "best sound, which turns a Mac into a music studio, complete with a full cast of musicians". "Best of the Best" went to Adobe Illustrator, a "powerful" Mac program.

Why the attention to all of this, beside the large interest in who

won "the Academies?" More than half of the programs that received awards have ST counterparts which equal or surpass the winners, in our only "slightly prejudiced" opinion. But the fact is the ST and its programs are not main-line, not main-stream. We still have work to do, all of us, so that when we're asked what computer we have, our explanation can be one word, understood, and delivered unself-consciously, with the other person commenting, "Oh, yeah, that's one of the most powerful computers out there, isn't it," rather than having us have to protest that it is.

Miscellaneous

Hear Yee!--This is to announce that Atari has changed its name. All dealers have been

requested to re-register under the new name. Seeing that Commodore was having success with Commodore Business Machines, Atari has formed a new "conglomerate", ATARI COMPUTER.

Amiga--Many of you have been hearing about Amiga promotions, seeing dealers adding the Amiga 500 and Amiga 2000 to their lines and reading in this column about the apparent success of their new marketing efforts. Whispers of caution are swirling about. The latest promotion involves user groups, i.e. when a member of a user group takes you in to buy a new 500 or a 2000, his group receives a \$50 or \$200 software credit. A nifty idea. Whispers have it, however, that dealers have not been paid for Amiga's last promotion.

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Newsroom Comes to the 8-bits

Due largely to an intensive Atari-user letter writing campaign, Springboard Software has decided to market an 8-bit version of its classic newsletter program, *The Newsroom*. The basic package contains 600 pieces of clip art; a drawing program, which allows the user to modify existing clip art or to create his/her own; and a built-in word processor with five fonts. *Clip Art Collection* (CAC) Volume 1 (all-occasion art); CAC Volume 2 (business art); and CAC Volume 3 (sports and recreation art) also are available.

To make the entire *Newsroom* four-program package as attractively priced as possible, until July 31 of this year, Springboard is selling the four together for \$69.80 plus \$5.00 shipping. For those who want to try out the basic program first, that may be ordered for \$39.95, with each clip art package being an additional \$10.00. To order, call Springboard (1-800-445-4780, ext. 3003), or write (Springboard Software, P.O. Box 141079, Minneapolis, MN 55414-6079).

Sons of Liberty Arrives

Employing an improved version of their own brilliant play system (*Gettysburg: The Turning Point*, *Rebel Charge at Chickamauga*, *Shiloh: Grant's Trial in the West* and *Battle of Antietam*), David Landrey and Chuck Kroegel have created a Revolutionary War game entitled *Sons of Liberty* for Strategic Simulations, Inc.. Unlike previous Civil War offerings, SOL includes not one but three battles from this earlier, less complex conflict. The very small but important Battle of Bunker Hill serves as an introduction to the system, while the larger Battles of Monmouth and Saratoga provide players with more complexity and greater challenges. As always the game may be played in Basic, Intermediate, or Advanced modes.

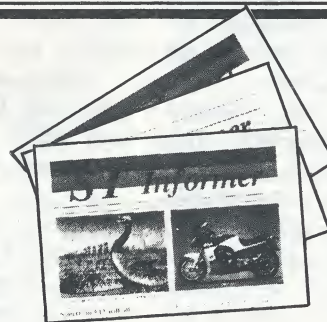
Sons of Liberty sells for \$39.95. Anyone wishing to order directly from SSI may do so by calling (1-800-443-0100, ext. 335), or by writing (1046 N. Rengstorff Avenue, Mountain View, CA 94043). Shipping is \$2.00.

More on the Atari XF551 Drive

Released in the fourth quarter of 1987 at a retail price of \$219.95, the Atari XF551 disk drive supports single-density, enhanced density, and double-density formats. The newest version of SpartaDOS or the new

Atari DOS (ADOS) is required in order to use the hyper speed and double-density modes. Presently the XF551 is being shipped with DOS 2.5 until ADOS can be completed (release date is unknown).

Also built into this drive is the ability to transfer data back and forth to the computer at one-and-a-half times the normal rate. According to Atari, the XF551 will run correctly on any Atari 8-bit, including the game system. Apparently, however, there is a major flaw with the XF551—it writes to side two of one's disk backwards, causing read/write incompatibility problems with all other single-sided drives. As a result Computer Software Services (P.O. Box 17660, Rochester, NY 14617, (716) 467-9326) has come out with XF551 Enhancer (\$29.95) which is advertised as restoring 100% compatibility between all drives while retaining all of the original design qualities of the XF551. Some installation is required.



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This month, this column will be devoted to updating you on the latest releases of the Magic Hard Disk and Floppy Disk formatters. Additionally, if you own a Translator and are having trouble formatting, reading and/or writing Mac disks, the later part of this article will provide you with some insight as to what's wrong, and what can be done about it.

New Format Utilities

If you are using HFS hard disk partitions or HFS floppies, by now you have probably discovered that if you copied a file with 23 characters or more in its name, strange things begin to happen. Some of the symptoms are that files or folders are no longer visible in "file dialog boxes". This should not be occurring since HFS has a file name limit of 31 characters.

Data Pacific has just released new versions of MCFORMAT (for floppies) and MAGICHD (for hard disks). These new files are available on GENie in the Data Pacific Round Table. If you are not a member of this RT, just type DP at any menu prompt to join. The file numbers are 182 and 183.

The following is a message from Dave Small, which was posted on the GENie Data Pacific RT. It explains what the problem was and how to use the new versions:

Okay, gang, here's the story.

When we released the "HFS Formatter", which stamps information onto the hard disk preparatory to you using it under HFS, we got a word wrong. This limited you to 23 character file names. Worse, if you ran into a filename longer than 23 characters, it damaged whatever directory information was next on the disk, starting at the 24th character. Typically, you'd get "File xxx could not be copied; cancel/continue" prompts. At this point your hard disk is nuked; nuked is Dan Moore's favorite word.

You will find odd results. You can't delete a file; "The trashcan cannot be emptied". You can't copy it or rename it. Basically, HFS is ALL messed up. Even trying to copy the file may crash the system, PARTICULARLY with an illegal instruction error, at PC = CEEE. (Just look on the crash page). This applies to both HFS floppies and HFS hard disks.

So, we've uploaded a new, BETA TEST version of MCFORMAT (for flops) and MAGICHD (for hard disks), which initializes the word properly. Now, you can't just change it on an already formatted and in use partition, because there's probably already damaged files out there. So, you need to re-initialize the partition with this new MAGICHD under GEM. You do not need to "reformat" the hard disk or the partition under GEM.

Now, assume you want to get your old files from your possibly bad HFS partition to your new, good one you just MAGICHD'd. Do you copy them? NO!!! This is because just accessing a flawed HFS disk may crash you (the CEEE Illegal Instruction crash). If you crash in the middle of updating the new HFS's directory, its history. So you need a safe way to transfer files.

The solution is MFS. MFS is immune to the file name length problem. So, set up a 5 mbyte (max allowed size) MFS partition, copy your bad HFS partition to it. If you've got Big Problems in your HFS, you'll find out now -- you'll crash. This is not the end of the world, MFS is pretty robust; just figure out what files are trashed in the bad HFS directory and don't touch them again. (So, copy the files a few at a time, so if you crash, you know which ones caused it). Get all the files over to MFS, THEN you know they are good and clean. Then, copy them to the destination (good) HFS partition -- possibly the bad one that you'll now go and make good with MAGICHD?

Be doubly cautious about HFS-HFS copies. As I said, a bad directory in the original HFS can crash you, and if you crash under HFS, it can leave your disk a mess. Both Dan Moore and Mark Booth lost their drive's contents this way.

You may want to use Meg-A-Minute to backup your partitions before doing this, just in case. It's reasonably speedy. (a meg per minute, get it?) It saves around 800K per double sided disk, so roughly 1.2 disks per megabyte are required.

I'm sorry for all the hassle; HFS is incredibly murky, the documentation flat lied to us in places, and the word that caused all this problem isn't even documented! Dan Moore did a heck of a job just getting it to 98%, and the last 2% was a bitch to find. But I know this means a lot of you will have to go fix your HFS partitions, and I'm sorry about that.

With a fixed partition, you need not fear any more about the file name length thing. Me, I got zapped reading in a public domain library disk, and a SCSI disk formatter off of GENie. Twang, directory damaged. I have to go back now and think if I even want to use that hard disk, or just reformat it and start over.. really a joy, right? (Remember, all these bugs you see, we get to see too...)

So, quick rundown:

1. The new MAGICHD initializes a partition (NOT A WHOLE DISK, your other data is safe) with the correct word (we hope).
2. Anything coming from MFS is safe, so copy from a possibly defective HFS to an MFS to "filter out" bad files/folders.
3. MCFORMAT does the same for floppy HFS disks.

The Translator

As I mentioned earlier, if you're having problems with Mac formatted disks, read on!! The following is

a series of messages from Dave Small which were also posted on the GENie Data Pacific RT. The messages have been slightly edited, and were compiled to provide a single narrative on the subject:

Now that we have the basic kinks ironed out of the Translator, we do have one continuing problem. I thought I'd mention it, why it happens, and just generally let you know what's going on.

Take a typical Translator configuration, on a 1040 ST. You have one internal drive, the Translator, then an external drive on the "Drive Chain". They're all wired together; the same 14 pin connector goes to everybody.

Now, this is fine—the Translator can sample signals to its heart's content, and can send stuff out the "Write Data" line if it wants to write something. The drives will respond. No problems.

Except ..

The Translator is really hearty about writing data. I mean, when it writes data, it doesn't mess around—the 7416 driver yanks the write data line down, really hard and fast,—like it should! That's the spec. Disk drives are a lot like modems—serial data devices. The better the data, the better everything works.

So, this whole long cable to the external drive, and the cable to the internal drive, and all that wire, is hooked to the Translator's Write Data line. When the Translator yanks that line from +4 volts to ground (in far under a microsecond), the whole thing .. well .. from a non-technical view, it "rings", just like banging a gong.

Now, just HOW it rings depends on many things. Cable length. Number of disk drives hooked up—remember, each drive hooked up means one more guy pulling the Write Data line UP to +4 volts. Whether or not the Translator is at the "end" of the disk drive chain, or in the middle.

When the whole mess "rings", a glitch can appear in the write data. It is a very small glitch, and only lasts a few billionths of a second (nano-

seconds). But, if a drive is VERY fast on its feet and sensitive, it will react to that glitch, and think it's a data bit. Boom goes your write operation—an extra bit just showed up.

The symptoms are that you can read Mac disks all day, but can't format/write to them properly. When you write to them, you blow away whatever sector you write to. Remember—when you stick a fresh Mac disk into the drive, an invisible file named DESKTOP is created, with sector writes. If you have hardware troubles, big problems.

The first solution to this was to add a capacitor to the 7416 driver, to "soak up" that ringing action, if you will. The problem was some ST disk drives are running RIGHT on the edge, and that added capacitance broke them—both in ST mode and in Translator mode. The drives we see from Atari vary WILDLY.

The second solution was to add a small resistor between the 7416 and the write-data line in the outside world. What this does is make the line not yank down quite so hard; the whole mess doesn't ring as badly; without that gonging action, the drives write just fine. Mind you, only about 10% of drives we see react to the glitch; we are not talking about the majority of Translators here.

Okay, but what if you have a totally shabby disk drive, that needs every little bit of oomph the 7416 can put out just to write? For instance, a drive starts writing when the write voltage gets BELOW about 0.8 volts. But I have a drive in the office that insists on 0.6 volts or less; if I put an inline resistor in, the 7416 can't pull down below 0.7, and the drive fails (3 other drives work). In the meantime, the ST works usually at 0.5 volts—this varies depending on the number of drives online.

So, first off. If your Translator works, don't mess with it. Your cable length may be right to not "twang" on writes. Your disk drives may righteously reject the transient noise of the "twang"—heck, they ought to, it's only 10 nanoseconds

and 0.2 volts big! I would be a tad cautious about changing your Translator's position in the cable, though.

If it doesn't work, try changing cables, or position in the cable. In particular, put the Translator on the end of the chain, dangling off the last drive—it doesn't have to be in the middle at all, just anywhere on the chain.

If that doesn't work, you can open it up and see if there's a really obvious resistor or capacitor soldered in on top of U2; it's marked. If not, there's a change DP can make to help your Translator get along with your disk drives.

There isn't, unfortunately, any easy solution. The true problem resides in the termination of the write data signal inside the Atari; it's causing a "reflection", or signal bounceback, that results in ringing. Changing it would require opening up your ST.

I estimate this affects about 10% of Translators. You can diagnose it pretty easily with TRNSTEST; if you've got a drive failing, and in particular if another one works, then that's probably it. It's the write data ringing.

My hands are tied in terms of going any particular direction. If I optimize the Translator one way, a certain series of Atari drives will fail. (Say, the voltage problem). If I optimize the other way, another series will fail (the ringing problem). Atari has a wide variety of completely different mechanisms inside those plastic cases; they must buy at a flea market or something, whatever is cheap that day.

There may well be no optimal solution, since we have to work with internal disk drives, and I can't splice into the ST to properly terminate it. Look, this is high speed data—one bit every 3 to 4 microseconds!—and termination is essential. Atari is darn lucky to be getting away with it as is; the rise times are shaky and the pulldown pretty darn marginal. Fortunately, the Atari ROMS don't detect all disk CRC errors, so a lot of failed writes go unmentioned ... weird twist of fate there.

The next irritating problem is drive RPM. When I wrote the Translator ROM, I assumed 300 RPM—I mean, everyone with 3" drives runs them at 300 RPM. There's not even a speed adjustment.

This was an error. LOTS of Atari drives run anywhere from 290 to 310 RPM. My code broke above 305 RPM, and I had lots of unhappy people.

The problem is like if you record a cassette tape slowly or quickly. When you play it back on another machine, it sounds too fast, or too slow. Macs are incredibly sensitive to this speed; just a little difference makes the Mac reject the disk.

So, you format a disk on your Translator, and take it to a Mac. The Mac rejects it. You've just learned why. The RPM was slightly off.

To complicate this whole mess, some drives spin at different speeds when they warm up, or when the disk inside them warms up due to friction in the diskette sleeve (I'm not kidding).

The present Translator on-board ROM software, version 15, does not automatically correct for speed variation. Remember, we shipped this back in December, and I didn't know Atari drives didn't play by the RPM rules — four of my office drives work at 300 +/- 1%, which is the rated speed.

Anyway, the solution to speed

problems has ALWAYS been, if it don't work, format it on the Mac. Remember this is only a writing problem; the Translator can READ disks written anywhere from 250 to 330 RPM, which is amazingly good tolerance. And fortunately, most people use Translators to import software. Finally, remember there are a lot of disk drives out there that are deglitched, that are at the right RPM, and so forth, and people are not having problems. The other ones, we hear about...

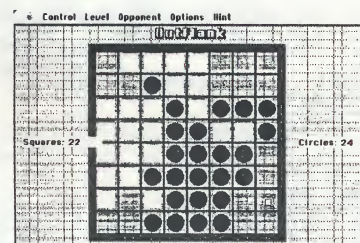
I will probably be doing a ROM upgrade to the Translator to help it dance with disk drives that are off-spec. There is speculation about offering a flat fee to field upgrade the Translator for a new ROM, the resistor mod to the write data line, GI chip instead of HP chip for MIDI, and so forth—all mods designed to let the Translator work with bad ST drives. Honest, we had no idea the sort of quality control that Atari was unleashing on the world! I'll announce more on this when there's something to announce; dP and I are going through lots of contortions right now.

If you are having problems with Mac formatted disks and your Translator doesn't have the internal modifications that Dave mentioned, contact Data Pacific for an upgrade.

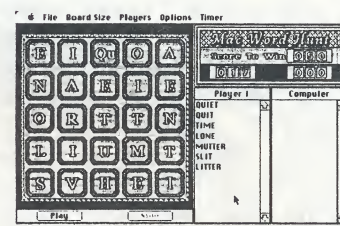
Now that you've read most of the story, the last sentence of

Dave's message seems to imply that all is not well at Data Pacific. It appears that there may be a parting of the ways, which may impact on the future development of the Magic Sac. I'll try to shed some light on the situation in the next issue of Current Notes.

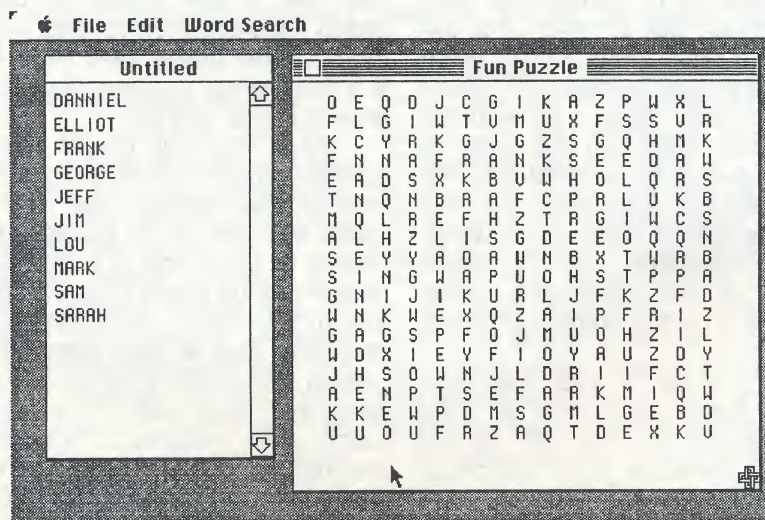
Oh, Yes!!! Congratulations are in order to Sandy and Dave Small on the birth of their third child, James M. Small, on April 19th. I wonder what the middle initial stands for? You don't suppose? Nah!!!



From #M51: OUTFLANK



From #M51: Mac Word Hunt



From #M51: Word Search

New Library Disks

This month, two new disks have been added to the Current Notes Magic Sac Library. Here is the titles and what is on each disk:

Disk M50, Fonts #8, contains 10 new fonts in various point sizes. They are Alderney 9-48 plus Alderney Docs, Cairo 18, Cyrillic 12, Greek 10,20, Paint 18, Playbill 12,18,24, Rehovot 10,12,20,24, Runes 12,24, Washington 12, Zodiac 18.

Disk M51, Games #11, contains 6 new games to amuse. The titles are Bouncing Balls, Fire Zone, Mac Word Hunt 2.0, OutFlank, Risk and WordSearch.



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Life Gets Stranger . . .

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This is going too far!

Recently, one of Frank Sommers' legendary "ST Update" columns here in CN talked about me mentioning the Magic Sac in connection with SDI ("Star Wars"). Frank said, "Star Wars is a fantasy ... fantasy .. fantasy."

Now, I thought that was a little strange. I'd made some brief joking mention about it in a previous column. But, you know those CN editors... have to let them have their little foibles. [I figured, if I were Frank, and was doing a column making predictions about Atari, I'd be a little irritable too.. (grin).]

So, I pick up my April "Current Notes", and here's this article by one Chris Anderson about SDI and the Magic Sac -- mentioning that same old column I'd done. Chris, er, doesn't like SDI. And is willing to say so.

Now, I've talked with Chris online on GENIE, and he seems like a bright enough person (for someone who disagrees with me). (grin)

But enough is enough!

When I mentioned the Magic Sac so long ago, it was in a half joking way. I was speaking of the need for reliability in computers; as an example, I mentioned how embarrassing it would be to have the Magic Sac crash while running "Star Wars." Honest, that's all I said and meant; remember, this was in the era when the Magic Sac still crashed a lot...

Also, please bear in mind I spent September and October's columns talking about Nikola Tesla and his inventions, which raise interesting possibilities for SDI. In the introduction to that column, I recall mentioning one of the big problems with SDI is how difficult developing anything new is, especially software.

So, please, enough is enough. No more letters on this; let's let my

poor, trampled, ravaged joke about SDI and Magic Sac die a quiet death, okay?

Sorry, Dave: In this issue, a rebuttal to Chris' column, about SDI being impossible.

Aieee!

That's okay, Dave, we're all waiting for you to make your next joke in this column. Something about having the Contras use Magic Sacs, perhaps? Yuck, yuck, yuck ...

No! No, Frank! No more counter-columns about my little jokes! Please! I'll do anything! I'll confess! The invasion begins at 0400 on Omaha beach! I know where Jimmy Hoffa is buried!

[An evil chuckle is heard emerging from Frank's house] We're waiting, Dave...

Moving Right Along ...

Actually, this whole thing reminds me a lot of the frequent misunderstandings that people get into online. It reminds me a great deal of the Plato online network I was on in 1978.

Dave, that's the weakest transition from an editorial comment to the "meat" of your column we've heard yet. I mean, Hackercon to SDI was thin, but this is really squeaking by.

Look, I'll tie it in more strongly a little later. Be patient, okay?

Oh, excuse me. Go right ahead. [chuckle].

Plato

Plato was an online network run by Control Data Corporation, a.k.a. CDC. At the peak of its era, there were many large mainframes in Minnesota connected by phone line to thousands of users.

If this sounds like Compuserve or GENIE today, you're right on track.

(Plato has gradually faded out; I believe it is still running in a few places, but nothing like it was in 1978).

Plato began life as an "educational computing" system. It featured a fine, 512 x 512 bitmap screen--a resolution close to the current ST, but achieved in the late 1960's!--a language called "Tutor", and all sorts of "Courseware"--Plato Lessons to educate you on nearly anything. There was a neat lesson in flying a 747, I remember.

There were many fantastic games there as well. There were excellent role playing games. People got rich moving these games to microcomputers, when micros came out! (Witness "Wizardry"--Robert Woodhead, an author of it, was a Plato-ite that had written several Plato RPG's before.) There was an airfight simulator, very much like Air Warrior on GENIE.

Not seen yet, though, is the multi-player Star Trek game called Empire, surely the greatest burner of Plato CPU hours ever written. I became an Empire addict, logging some 2,000 hours on it during college--and ending up co-commanding the "Federation" team on it. Ah, for the college days spent locked in a small room, battling up to 31 other players...

Now along with all these games were a fascinating set of "notes-files", where people could talk about various subjects. These were lots like the Compuserve Forums or GENIE RoundTables. Naturally, the busiest notesfiles concerned political subjects.

This was my first introduction to serious debating with other people.

And wow, were there some serious fights in the Plato notesfiles. Take the worst "flames" (as they are called now) from Usenet, CIS,

Genie, or wherever, and they're close to Plato notesfiles.

I was a sophomore in college when I began on Plato. Many other colleges were tied into Plato. I'm sure it'll surprise you to find out that there was much ... well ... shall we say, political opinion on the left in these Plato notesfiles. I remember Greg, for instance, up at Evergreen State College, explaining how he was a Trotsky-ite, and didn't approve of only the current implementation of Marxism.

The Plato systems staff participated as well, which was quite dangerous—if you disagreed with them anyway. I had some bad experiences here, and learned to shut up sometimes. This ability has often stood me in good stead, particularly when talking with Apple employees (excuse me).

Well, back in 1978, I thought this was great. Politics! I showed up in my usual, subtle-as-a-hand-grenade way, and began talking.

Big mistake.

My political opinions were characterized, I recall, as to the right of the Nazi's; Greg wanted to know if all my opinions were straight from Maggie Thatcher. And so on and so on and so on ... gun control ... day care ... abortion ... you name it. Major political warfare carried out on a computer.

And I learned two extremely important lessons from all this.

First, the "debating society" is alive and well in the computer networks. It's like the opinion-editorial columns in your daily paper, but with a computer, anyone can join in (and does), and be heard instantly. People who think political debates are dry and dull should try one on a local computer system.

Second (and most importantly): These people I was fighting with were not the idiots I thought they were.

I had never understood much of what I'd heard politically that didn't agree with my views. For the longest time, I thought that people who believed otherwise were, well, complete idiots. (Let's be tactful, right?)

But the people I would debate

with and challenge ... had perfectly reasonable ideas too. Given the basic things they believed in, these opinions and ideas were absolutely consistent. Many were the times this was pointed out to me.

I could rattle off a list of impressive sources for my information. Experts. Quotable quotes. William F. Buckley. Robert K. Brown. And so on.

And they could too. Of course, it would be people from the more liberal side, but experts are experts.

Given the basic "world view" of those sources, the opinions were inevitable. They could be just as solid appearing as my opinions were; I could see the logic and reason behind their opinions.

... For the longest time,
I thought that people
who believed otherwise
were, well, complete
idiots. ...

After a while, I came to see that the "world view" was what mattered the most, and that given the wide variety of "experts" and "sources" on any subject, *you could find an expert to back up any opinion.*

The Plato people took delight in quoting experts that agreed with them, as I did. But after awhile I began to see this was nonsense.

At this point, I mellowed out considerably. These people weren't idiots; their basic values were different than mine. The opinions they built up out of their basic values were well reasoned, logical, and consistent.

It's all very reminiscent of Nikolai Lobachevsky, who came up with "non Euclidean geometry". Geometry begins with a few basic, unprovable foundations. For instance, parallel lines do not intersect. From those definitions, a whole geometry is built, and it is self-consistent.

Lobachevsky's work was non Euclidean. He'd start right out by

saying, "parallel lines intersect"—and the geometry he would build up was entirely self-consistent. Provably correct, from within that geometry. I know it sounds strange, but it works.

While I felt that many of the Plato people's opinions were wrong, there was no way to prove it through attacking their self-consistency (or just plain attacking them). As does a non-Euclidean geometry, their opinions held up, given the basic assumptions.

Finally, I also saw that people's world-views, those basic assumptions, were inherently unprovable. What did they know or I know, for instance, about Afghanistan? What we'd read in the papers that day? Yep, there's a really consistent, accurate source. (That was sarcasm). Have I ever been there? Seen it with my own eyes? Nope. Neither had they. Yet I remember several good fights about if the Soviets should have troops in there, "invading" (me) or "supporting the native government against rebels" (them).

There is much that you and I "know" about the world that we don't really know. We've not seen it with our own eyes. Yet we assume it's true. (This is also a basic propaganda tool. Change the world-view, change the way people think, automatically. Very useful stuff.)

In time, I grew to be friends with ... gasp! ... the people I had disagreed with so strongly. I grew to value their reasoning ability, and like them as people. Their opinions ... well, we didn't talk about those. (Although I can recall switching political roles one April Fool's Day with Greg, and horrifying nearly an entire network.)

So, nowadays I see the same battles erupting on Compuserve and Genie and Usenet and... There's people who act much the same way I did in 1978, assuming that people who disagree with them are "idiots." Take for instance the Atari 16-bit forum on Compuserve; here, a note sprung up about bankers being "leeches" that "feed off the poor." Many, many political

replies followed. Regrettably, one of the Compuserve part-time Sysops is a banker. (I thought he showed remarkable restraint in staying out of fight.)

They're going the same way Plato did. Some are learning to understand; some never will; some know better than to get into a fight about such silliness.

I am going to be very interested to see if the next development of Plato occurs on the big networks—that's a computer romance. Already I've seen signs that it does happen over on GEnie. But, perhaps, more on this in another column.

Computer political (and other) forums. Interesting stuff.

The bad thing about them is the personal nature of the attacks, the intolerance you'll run into. Pop your head up in the Amiga forum and talk about the Atari ST. Then duck! There will be incoming fire.

The good thing about all this is it gives other people a chance to intensely debate and question other people's opinions. You really don't get this chance in the outside world much anymore. And I think many people will conclude, as I did, that people that disagree with me aren't really idiots; they are just probably people with different basic feelings about the world.

Okay, Editor, ready for me to tie this all up with the introduction?

This I got to see.

So we come to Frank and Chris' columns in *Current Notes*, about SDI. They're not real wild about it. I happen to support SDI.

But, I just can't bring myself to instantly condemn either of them as "idiots" because they don't agree with me. That's the effect the Plato experience had on me. Chris can quote many people, and did in his article, that seem like "good sources." I'm sure the rebuttal to Chris' column will quote other "experts" too.

But heck, I really don't know who's right. Gen. Graham says he

can have a working basic system in four years, if he's turned loose to do it now. The anti-SDI folks say it's impossible, forever. Some of them are competent people who deal with missiles daily. How should I know who's right?

At this point, the Plato teachings come back to me, and I realize, I've happened to pick the "experts" whose world view agrees with mine as my "experts", as people to believe in. Chris, he's picked someone else. That doesn't mean his reasoning, given those experts, is any different.

(And which is why me writing a column in disagreement is completely futile.)

... Be careful online, if you're being sarcastic, you have to say so, or many people won't realize it. . .

Several things here:

- ♦ For those of you who haven't got a modem, spend the fifty or a hundred dollars to get one. Check out your local BBS's; check out the big nationwide networks. There's something happening there you're missing out on! The "latest" ST news is often the least interesting thing happening.
- ♦ It is very valuable to learn just how much you don't know about the world and about what's going on. Of course, getting politically shredded is sort of a hard way to learn it.
- ♦ Be very careful online, as I'm trying to be here. If you're being sarcastic, or saying something in fun, you have to say so, or many people won't realize it. Remember, the only thing that comes across are characters; your tone of voice, facial expression, body

language, and everything else are lost. You've got to be careful to include them if needed, lest you be misunderstood.

- ♦ It is always best to leave yourself a way out. Many are the times I've seen people paint themselves into corners online. (Another singularly bad move is to irritate the Sysops, who run the whole place). It is best to (grin), (shrug), and move on. This is why I keep the Magic Sac areas online so deliberately light hearted; it is hard for people to go into an irritated yowl when everyone around them is having fun. With a controversial product, such as Magic Sac, this is essential.

- ♦ Again, if you've not got onto the nationwide networks -- do. If nothing else, check out the weekly Wednesday night Atari RoundTable Real Time Conference discussion on GEnie; there, 20-40 people get together and talk about the ST, all in the same place. Sometimes really interesting things happen, like when one of the Tramiels shows up to chat. I hope this column's been interesting for you, and if it leads you online, I hope it gives you a few basic starting out rules to work with. It really is worthwhile; there's more going on around you, on the networks, than you can possibly know about unless you're there.

As usual, if you'd care to write, I'm available at:

BIX: dsmall
CIS: 76606,666
GEnie: DAVESMALL
Usenet: hplabs!well!dsmall

Or, if you prefer more primitive communication (stone knives and bearskins?):

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A Look at the Market for CD-ROM Drives

The success of a computer peripheral is most often measured in terms of number of units sold (installed base) combined with projections of future annual sales. This method of analysis works for most computer peripherals. A printer's a printer; a modem is a modem; sales of 80 megabyte hard disk drives may represent an upgrade. One can purchase any of these items, attach them to a computer, and that's that. Penetration or percent of market share of a certain peripheral can then be measured in relation to the installed base of computers and the number of units sold by each manufacturer.

In theory, the same technique could be applied to measuring the degree of success of CD-ROM drives. In practice, however, it does not work quite that way. The single difference is that without appropriate software—CD-ROM titles—a CD-ROM drive is useless. Another way of saying the same thing is, CD-ROM drives are not sold unless there are suitable applications. The difference between sales of CD-ROM drives and other microcomputer peripherals is the dependency on available applications. In fact, there is little difference between the early years of microcomputers sales and the need for a VisiCalc-type application and the events surrounding sales of CD-ROM drives during the 1985–88 time frame.

The overall growth of the CD-ROM industry—as measured in number of CD-ROM units sold—was certainly way below expectations by the end of 1987. For the United States, the conservative estimate is 30,000 drives sold, plus or minus two to three thousand units. More optimistic bean counters estimate fifty, maybe sixty thousand, but no more. This varies widely from most all forecasts.

Is CD-ROM doomed? Is CD-ROM yet another flash in the optical technology pan? Has the "VisiCalc" for CD-ROM arrived? The answer to all three questions is, without a doubt, "No".

The estimated number of drives sales in 1988, and probably for at

least one year after that, will be totally dependent on whether or not there are applications ready and shipping. The difference between the 1987 through 1989 period and the 1990 and beyond period is the nature of the applications. Through 1989, applications will be targeted to vertical markets. At about the 1990 point, we will see broad, horizontal applications for CD-ROM, and AT THAT POINT, we can apply the traditional bean counting approach to analyzing success of the CD-ROM peripheral as measured in number of units sold.

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In the meantime, how do we determine whether or not there is a significant penetration of drives into those vertical markets that have "found" CD-ROM. A measure is, of course, the number of drives sold per market, which is closely guarded information. Another is the rate of adoption of CD-ROM products and services by a vertical market following a product announcement.

By the end of 1987, there were essentially three vertical markets for CD-ROM of any significance—library, financial, and medical. The first commercially available title in January 1985 included Library of Congress bibliographic records and was directed to the behind-the-scenes cataloging section of the library. This same product is now used in at least 2,000 libraries, and many other competitive products are enjoying similar success. From there, the reference section of the library was addressed with CD-ROM discs containing indexes, abstracts, and full-text of reference works used most often in the library's reference section. One vendor supplying a reference product on CD-ROM achieved 167% of sales within the first year. At the last

American Library Association conference, there were more than sixty vendors with reference products. In early 1986, the first CD-ROM based public access catalog (PACs, formerly card catalog) was introduced. By mid-1987, seven vendors had such systems, the majority of which are overwhelmed by requests for proposals. Now, the states of Pennsylvania, Wisconsin, Maine, Virginia and others are installing such systems in libraries throughout their state. CD-ROM drives are now moving into every niche of the library market, and in turn, the penetration sales of CD-ROM drives is quite high for this market.

One survey of librarians indicated that 90% of the libraries in the U.S. would have at least one CD-ROM drive by the end of 1988. At last count, this number was approximately 40,000. Given the addition of ten CD-ROM PACs and five reference workstations, for instance, this number grows easily to more than 1/2 million drives by 1990 for the library market alone.

Similar scenarios are occurring for the medical and the financial markets, and will begin for the legal, travel & leisure, defense, architect & construction industry, and other vertical markets throughout 1988–89.

Any estimate of annual sales of CD-ROM drives for these years will then be totally dependent upon whether or not the applications get to market, are priced reasonably, and the information on the CD-ROM disc is considered valuable to purchasers. Conservative estimates for 1988 are sales of 90,000 units in the United States, plus or minus 10–15,000. For 1989, the conservative estimate is 150,000. These numbers reflect natural growth, not growth based upon the instant adoption of CD-ROM drives by one or more markets.

The bottom line is this. To estimate CD-ROM sales in this decade, one must know the degree to which any single vertical market suffers presently from the inefficiencies and costs of acquiring and using data distributed on paper, microfiche or via online services,

the tendencies of vendors supplying information to those markets to move to CD-ROM as an information distribution device, and how soon such products will be shipped.

There are many exciting CD-ROM applications under development and ready for shipping in 1988. West Publishing has announced its entry into distributing all necessary legal documents on CD-ROM. McGraw-Hill's Information Systems Division will introduce its Electronic Sweet's indexing system on CD-ROM to accompany the hardcopy edition that is normally distributed to 34,000 architects and construction engineers. Under the CALS (Computer-Aided Logistics Support) initiative, all branches of the military have been ordered to move all paperwork to electronic form, and CD-ROM is the obvious dissemination mechanism. Many CD-ROM projects have already begun in the Army, Navy and Air Force.

Computer manufacturers should not be overlooked. All the majors have announced some effort dealing with CD-ROM. Apple Com-

puter will begin shipping its new CD-ROM drive, the AppleCD SC, this spring. Digital Equipment Corporation uses CD-ROM drives as file servers for distribution of in-house, stable information and for delivering operating system and networking software to customers. Hewlett-Packard will begin the delivery of all user support information and later all documentation on CD-ROM to purchasers of HP's

... Buyers--as well as
dealers and distributors--
need to experience
what CD-ROM is all
about...

Vectra or MS-DOS compatible equipment. Tandy Corporation announced in March the sales and marketing of Hitachi's 1503 SUY drive via its express ordering mechanism. Atari Corporation has announced a drive, ready for shipment in mid-Summer. Even IBM openly demonstrates prototype

applications on CD-ROM at trade shows.

In the short history of CD-ROM, it is easy to see the pattern. First, a single highly visible product is introduced at a trade show. One year later, there are twenty products. CD-ROM drives are then sold along with these applications to seed the market or purchased from other sources with an accompanying horizontal-type product.

The message to retail dealers and distributors is clear. Off-the-shelf sales are not yet feasible. Supplying drives to specific markets in tandem with applications is. In the meantime, becoming familiar with CD-ROM, having a unit with an appropriate demonstration of a relevant application in full public view, is mandatory. Buyers--as well as dealers and distributors--need to experience what CD-ROM is all about. A database on CD-ROM represents mainframe storage on a microcomputer. This concept is meaningless without an appropriate application. If an application is appropriate to a customer, the sale of the CD-ROM drive follows.

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- 144 Great Chess game from Germany (Krabat). Very easy to play, but tough to win against the computer (color or mono).
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- 162 Stoneage Deluxe - A fantastic Boulderdash-type game. Can design your own screens. (Joystick; COLOR).
- 192 Picture Utilities #2 - Picswitch 0.7 (convert pics between formats and color/mono), drawing programs, much more!!!
- 214 Kids #3 - Great kids programs. Barnyard (like Concentration), Etch-a-Sketch, Drawpad, ABC's. (COLOR).
- 223 Speech #1 - Hear your ST speak what you type, or even read your own text files out loud. Other speech examples...
- 237 A fantastic C Compiler by Mark Johnson. Includes source code for a spreadsheet and some Unix tools.
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USER GROUPS

It was a cold, damp night in Sunnyvale. The unusual weather had moved down from San Francisco, adding to the discomfort of the men sitting in the sumptuous living room. In one corner was Jack Tramiel, staring out the window as the ocean waves pounded against the beach.

Sitting close to Tramiel, on a floor cushion not 10 feet away was Neil Harris with a copy of the Wall Street Journal in his lap. The headlines read "Tramiel buys Atari from Warner". Harris spoke rapidly in the fashion of a young reporter, "Gee whiz boss, we sure got some good press!"

Jack Tramiel turned momentarily, smiled, nodded and continued looking out the window engrossed in his thoughts. Surely his thoughts were on the risk to his fortune now that he had bought Atari? How was he going to keep this company going until the still secret 16 bit line was out next year? Everything he had worked for was at stake but nothing appeared right at the moment.

Across the room sat Sig Hartmann who had been with Jack Tramiel a long time. He was Vice President at Commodore and who knows what else where else. Sig put down his copy of Der Spiegel and said, "Jack, we're planning to cut costs as you ordered. Corporate employment will be reduced to only a few hundred people. Of course, a reduction in personnel creates other problems. Namely, who is to service the products we sell? The

planned cutbacks eliminate what little customer support Warner provided to Atari owners. Further, there is no dealer network."

Going over to his favorite easy chair, Jack Tramiel suggested it would be nice if someone could get some sandwiches as he had not eaten since writing the check. Harris immediately volunteered, took the order and walked out the door toward the waiting limo headed for Metropolis and the sub shop.

Back in the house, Sig was alone with Jack and son Sam Tramiel. Nothing much was said for 20 minutes or so. Suddenly, an idea came to Sig. He broke the silence, "One way we can keep people buying Atari products even though we have no customer service network is to utilize the existing Atari user groups."

Jack turned in his chair, dropping hot cigar ashes on his pants. Sig went on ignoring Jack's smoldering trousers, "User groups have been galvanized through opposition to policies adopted by Warner. They have repeatedly stressed the versatility and power of the 8-bit computer with the public. We must sell the 8-bit inventory inherited from Warner to stay alive. Further, by gaining their support, we can move away from just a game machine company in the public's mind."

Jack Tramiel continued to stare out the window but now thoughts raced through his mind. After about two minutes, he bolted from the chair dropping his cigar in his bourbon and

water. He was belly to belly with Sig and shouting, "Yes, the user groups can help us sell the inventory of 8-bit products while Shiv has time to bring on the new 16-bit ST computer line. In fact, even after we start selling the 16-bit computers in the U.S., we can tell everyone to go to the local user group for support".

Jack was now into it. He turned and said to number one son, "This arrangement will reduce our financial requirement to service the products we sell while at the same time advertising how user groups are providing enhanced customer support to the new buyer. It's free except for some minimal outlay for a user group representative here at corporate headquarters. It will and must work!"

Both men congratulated each other on the beauty of such a system. It was all so simple—service the public through involving the public. This was the answer to the liquidity trap. A greater share of Atari's financial resources could now be allocated to develop the next generation of 16-bit computers.

Sam Tramiel had been quiet up to this point. He looked at both men and said, "This will work for a couple of years, then it will be time to pay the piper. In other words Dad, sooner or later, the user groups may need help as our corporate policies change and we move away from the 8-bit computer. What do we do then? They will expect our support . . ."

While the conversation above is, of course, fictitious and events compressed, the corporate plan implemented by Atari was fairly close to what has been depicted. User groups did everything in their power to aid Atari's resurgence. User groups promoted the 8-bit computer line, explained to the public how Atari's corporate outlook had changed, and took on the task of being de facto customer representatives for Atari. After one year, inventory declined, cash flow improved, and everyone awaited the imminent arrival of the ST. In retrospect, one might say that 8-bit sales bought Atari the financial time it needed and user groups contributed to the success of this strategy.

However, with the advent of the ST computer, corporate policies indeed changed, just as Sam Tramiel might have said. Atari has all but ignored 8-bit users and, for the last year or so, the priority of U.S. ST purchasers has declined. Atari's focus is the European market where ST sales are strong. But in Europe, there are few old-time users who remember the early days.

The lack of attention on the part of Atari over the past year or more has taken its toll on U.S. user groups. Some have gone completely out of existence, some are just a shell, and others have witnessed a decline in numbers and/or participation. It is in Atari's

interest to reverse this trend. What can Atari do? Well, there are two reoccurring themes in the responses to my queries of user group representatives:

- Atari could make user groups the initial beneficiary of insider information on new product releases, bug fixes, and general hardware/software support. This could be accomplished through bulletins and technical fact sheets made available to the designated officer of a user group. Another suggestion would be for Atari to provide technical summaries of GENie files concerning important hardware/software modifications. Simply put, consistent communications creates a rationale for a user group – the transmittal of technical and product information to users.
- Atari could develop a road show. Thousands turn out in selected cities when Apple technical types visit to show-off the new wares to the users in the provinces. Why can't Atari schedule one or two people for "a-month-on-the-road" each year with user groups demonstrating new hardware/software as well as third party contributions. This might be much more cost effective in the long run than appearances at various Atarifests.

One of the persons I asked for suggestions was the President of the Northern Virginia Atari Users Group, Georgia Weatherhead. While she was writing a response to my questions, the mailman deposited at her door a new Atari publication to be issued monthly. (This really happened, one day prior to submission of this column!)

She immediately called Atari and found out that one copy will be distributed to each user group and the person responsible at Atari is Ms. Elizabeth Shook. The publication is located within the new computer division at Atari and Chuck Babbitt is its President. The initial issue is concerned solely with 16-bit computer information. I hope this publication will also recognize the needs of the Atari, non-games, 8-bit community. A substantial portion of the membership in the Washington, D.C. area operates 8-bit machines.

In any event, assuming this new publication continues and the content is expanded incorporating more technical information, it will help user groups lure back old members as well as the needed new blood. Ultimate success depends on word being spread on club events to local Atari dealers, user group members actively recruiting, and even in some cases innovative publicity. After the shake down period for the Atari newsletter, the ball is in the user's group court. They better get ready. THIS IS AN EXCELLENT START BY ATARI. Congratulations.

Most of the users felt strongly the "travelling road show" would be of immense value. This statement is qualified, of course, by the assumption that adequate local publicity precedes any visit by Atari officials. The road show has a number of advantages. It demonstrates to existing members the concern of corporate Atari. It has the potential for significant, immediate increments to user group membership rolls. It generates local media publicity favorable to Atari and, by implication, shows its concern for users to potential computer buyers.

Needless to say I do not have all the answers nor even all the right questions. If Atari would like to join the dialogue, I would be willing to surrender all the space necessary for a response and/or alternative proposal(s). It's their call! User groups and Atari must have a better working relationship.

That's all for now folks

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LASER QUALITY WITHOUT A LASER PRICE

The HP "DeskJet" inkjet printer is without a doubt the single most important technological development for desktop publishing to come down the pike since the laser printer!

By Jim Wallace

For many of you who have been anxiously "wishing and hoping" for an alternative to a laser printer and expensive memory upgrades for quality desktop publishing--the wait is finally over! Now, thanks to Hewlett Packard, you can get real "laser quality" output WITHOUT a laser printer! This is a review of the new, HP "DeskJet" INKJET printer that offers real "power without the price" for desktop publishers, and is without a doubt the single most important technological development for desktop publishing to come down the pike since the laser printer!

Weighing Your Options...

It was rumored for some time that Atari might introduce a low cost, high resolution printer that would run with relatively low memory. Instead, they introduced a laser printer for \$1,995 retail that requires a minimum of two megabytes of memory to operate. This means that on top of the expense of the printer itself, you must either purchase a new Mega ST with at least two megs of memory for about \$1,500, or upgrade the memory of your present ST computer to at least two megabytes. And since the required one meg memory chips have recently skyrocketed to around \$40. each, you will spend about \$700. for a memory board and the required 16 chips it takes to get a 1040ST to 2 1/2 megs. This is because most boards require that you go to 2 1/2 megs instead of just two megs. Again, adding this required 1 1/2

meg to a 1040ST to get it to 2 1/2 megs requires 16 one megaBIT chips since these are measured in "bits"--not "bytes".

Besides buying an Atari laser printer, there are of course other alternatives available. You could purchase a Hewlett Packard LaserJet printer or compatible. Unlike the "Atari solution," you won't be required to upgrade your computer memory to run these printers--but, you'll have to upgrade your printer's memory, and this will cost about the same as upgrading your Atari computer's memory.

You can of course, also purchase an expensive "Postscript" printer, but this will run you at least \$3,500 for one of the "cheap" models! "Souped up" units with more memory and more fonts, faster output, etc. will cost you even more.

Bits, Bytes and Bucks...

This extra memory, by the way, is needed because a laser printer must print the whole page "at once." And for quality desktop publishing, you'll need 300 dpi (dots-per-inch) resolution which interprets into 90,000 bits per square inch that the printer must deal with. For a typical 8 1/2 x 11 inch page, your image area is about 8 x 10, and 8 times 10 equals 80, and 80 square inches times 90,000 bits comes to a whopping 7,200,000 BITS of image, which in turn translates into almost 1 megabyte! What all this means is that a typical laser printer MUST have about 1 meg just to create and hold the page for printing. Additional memory is required for fonts and other files.

In short folks, there's a BIG

"gotcha" anyway you go if you want a laser printer for desktop publishing. In the near future, perhaps as early as late this summer, when memory chips have hopefully come down in price, and Atari introduces a rumored "Postscript compatible software driver" for their laser printer, things should be different. But, if you're like me, and are tired of almost endless "real soon now" promises, and must get things done NOW, an answer has ALREADY arrived.

A Dream Come True...

Just introduced in the first quarter of 1988, the amazing Hewlett Packard "DeskJet" printer has solved the output problem for most of us. So finally, the "rest of us" have a relatively inexpensive, practical, and viable answer to high quality output on the Atari ST computer. In short, the DeskJet is "A DREAM COME TRUE"--and in more ways than one!

Comparing the Technology

As most of you know, "laser" printers apply their image to paper the same way as most "dry" toner photocopiers. In fact, the only difference between a "copier" and a "laser printer" is what FORM the "original" is in--a "digital stream of bits" or a visible, tangible image on paper. (Note that the new breed of "digital copiers" like the Canon Color Laser Copier, also use lasers to image the drum, yet cannot be connected to a computer).

A "conventional" photocopier uses optics and "normal" reflected light to expose an electrostatically charged drum with a mirrored image of the original.

A laser printer or laser copier, on the other hand, uses optics which reflect a high intensity laser beam onto the drum which produces "rasterized" rows of dots which mirror the original, digital computer image.

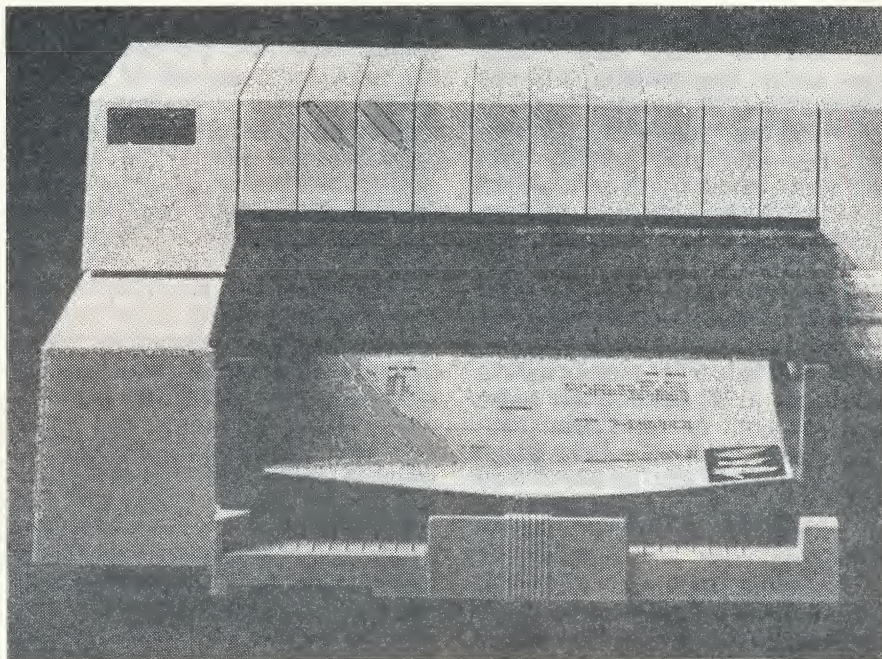
In either case, after the drum has been charged by light, both technologies produce the image onto paper in exactly the same way. This is done by using a dry, powdered "toner" that clings to either the image, or non-image areas of the drum (depending on whether "write black" or "write white" technology is used) and is then deposited onto the paper. This toner, which is basically composed of black carbon and plastic resin, is then "fused" (literally melted, or "glued") to the paper surface by heat and pressure. There is no "ink" involved, and the toner is left "stuck" to the surface of the paper. I've simplified this process a bit for brevity, but I think you get the general idea.

Back to the Future...

As someone who has been involved in printing and "graphic arts" for many years, I have a "special affection" for the HP DeskJet. This is because it uses a unique "inkjet" technology to put images on paper. Specifically, this unique print method is described as "plain paper drop-on-demand thermal inkjet printing." Much like an actual printing press, the HP DeskJet uses real, liquid INK and literally "sprays" this directly onto (and into) the paper, much like one of those robotic arms which automatically spray paint products on an assembly line.

Although inkjet technology has been used for the past few years for high-speed addressing and other low quality "imprinting" applications, Hewlett Packard is probably the first to apply this innovative, high tech process to high quality output for personal computers.

The DeskJet uses a unique, replaceable ink cartridge/print head that produces an image by blowing ink through tiny, microscopic holes in its patented print head. The print head travels down the page in horizontal "passes" from left to right, across the sheet, much like other printers.



Unlike printers which use ribbons, an inkjet printer produces perfectly inked images without the annoying white lines, faded areas, and other imperfections produced by even the best dot matrix "impact" ribbon printers. Note that inkjet, wire impact, and laser printers are all dot matrix printers. The only difference is HOW they put the dots on the paper.

In fact, large-scale inkjet printing technology may someday be used instead of printing presses to print just about everything—including your daily newspaper! The equipment just needs to be built large enough and fast enough to be able to move more paper through the machine.

Performance?...It's "BAD!"

And just to prove how "bad" it really is, the HP DeskJet is not afraid to print large, perfectly printed black solid areas and even fine screens. In fact, fine screens look so good you can't tell whether they were produced by inkjet or by off-set printing. You see nothing but a solid gray, no lines or streaks whatever—but that's not all folks! While producing perfect solid blacks, it also produces the finest hair lines. Pages produced by this amazing printer are picture perfect, and are as good (and in some cases better)

than anything you can print on even the Atari laser printer. And I use the Atari laser printer for comparison because it produces probably the best image quality of any laser printer on the market today. And yes, it is virtually impossible to distinguish the difference between the same pages produced on both the Atari laser printer and the HP DeskJet. The DeskJet is normally slower, but the quality is the same. And since the DeskJet can be purchased for much less than \$1,000, combined with the fact that it operates just fine on one megabyte of memory, this makes it a real "power without the price" product! In fact, the DeskJet is to printer price/performance what the Atari ST is to computer price/performance.

As you may have already guessed, I'm really sold on the Hewlett Packard DeskJet! But to put this opinion in perspective, I've been in the graphic arts industry for many years. I've set REAL metal and wood type by hand, and I've also set type on some of the leading photo and digital typesetters used in commercial typesetting. In other words, I'm into desktop publishing "from the top down," instead of from the "bottom up." And because of my background in printing and advertising, it takes quite a lot just to get my attention, let alone my "admiration."

Since purchasing the DeskJet,

I've really "put it through its paces." I've tried the "hard stuff," large black solids, fine screens, and I've looked through a jeweler's "loupe" to see if the fine "serifs" are printing well. I've also tried printing both very small, and very large digitized photographs scanned on a Navarone scanner at 300 dpi.

Comparing output from the DeskJet with even a great laser printer like "Atari's own," I've yet to see anything that is not equal in quality. In fact, I've even made a "game" of it. By printing the same pages on both the Atari laser printer and the DeskJet, I have given these to people just to see if they can tell "which-is-which." And so far, no one has been able to tell the difference!

However, don't get me wrong, there IS a way to tell the difference. But the "secret" is to look at the BACK of the sheet! Yep, because inkjet printing uses real INK, it normally "wrinkles" the paper ever-so-slightly wherever it deposits the ink. This is not a "problem" however, it is simply one of those subtle little differences that are a part of any printing process. For instance, experienced printers can easily differentiate between sheets which have been printed by offset, letterpress, gravure, silk screen, and other printing processes by simply knowing what "clues" to look for.

Feed the Kitty...

Besides outstanding print quality, another advantage to using the DeskJet is that it uses cut sheet, plain paper. And while some paper prints better than others, almost anything works. The convenient paper tray holds up to 100 sheets, and the automatic paper feed mechanism functions perfectly and is very easy to use.

Another major advantage to using cut sheet paper is that paper alignment is no longer a problem. For instance, if your software was set for a half inch margin all the way around the page, then that's EXACTLY what you will get! No more wasted time trying to align the horizontal and vertical position of tractor feed paper!

Although any decent "bond" type paper works fine for most work, I've discovered by trial and error that for the finest reproduction possible you should use "Ham-

mermill Laser Plus." It even has a special "wax hold out coating" on the back for paste-up of camera ready masters. For the finest "reproduction proofs" this premium paper is tops. For a free sample pack of this fine paper and a Hammermill dealer near you, you can call them toll-free at 1-800-621-8272.

The DeskJet not only feeds paper sizes up to 8 1/2 x 14, but will also feed envelopes! But because the paper must wrap around a roller (called a "platen") much like a typewriter, this limits the paper thickness to about 60 lb. stock. It cannot feed "thick" postcards, and mailing labels are not recommended. Small, die cut labels might possibly come off and stick inside the machine which could cause problems.

...The DeskJet is to
printer price/perfor-
mance what the Atari
ST is to computer
price/performance...

When printing envelopes, these must be fed by hand. The envelope feature is included for people who don't have a typewriter and simply want to print simple addresses and the like on standard sizes up to a #10 size business envelope. You can print on these by using almost any word processor, but the process is slow and is only included as a "convenience feature."

Personally, I simply use my now "almost obsolete" dot matrix printer to print labels the "old fashioned way." And for postcards and other thick stock, I just create an original on the DeskJet and then photocopy this on 8 1/2 x 11 inch "postcard stock" and cut out the cards as needed. But shucks, not even laser printers can feed EVERYTHING!

Since having the DeskJet, I really haven't used the old dot matrix much—but it's not yet totally obsolete. It has now found a "new career" as a scanner, using the "IMG Scan" attachment.

Compatibility Assured...

Surprisingly, compatibility is fortunately a "non-issue" with the

HP DeskJet printer since it uses some of the most popular printer languages in use today. The DeskJet comes with the HP PCL (level 3) printer language built-in and an optional Epson FX-80 emulation cartridge is now available for about \$75.

Next to Epson and Postscript, the popular HP PCL printer language is supported by more software than you can imagine. Practically EVERY serious software program for both the IBM and the Atari ST supports this very popular language. This is mainly due to the immense popularity of the HP LaserJet printers. In fact, there are more HP laser printers and compatibles around than any other type of laser printer, and this includes the Apple LaserWriter. What this means to you is that since the HP LaserJet and DeskJet both use virtually the same language, you can use the popular HP LaserJet drivers for your DeskJet! Note that the DeskJet doesn't need to be "compatible" with the LaserJet—it simply uses virtually the SAME language! I've used my DeskJet with HP 150 dpi and 300 dpi LaserJet drivers with programs like *Publishing Partner* and *Drafrix 1* with no problems whatever.

NOTE: Specifically, the DeskJet uses HP PCL "level 3" and the HP LaserJet uses HP PCL "level 4." But the subtle difference shows up only when doing justified, "micro-spacing" in TEXT mode when using the DeskJet's internal ROM fonts. Currently, *WordPerfect* is the only program supporting this feature in conjunction with HP's optional font cartridges which are almost identical to those used by the LaserJet.

GDOS Output: GDOS output is already a reality from programs like *Easy-Draw*, *Athena CAD*, *Microsoft Write*, and *TimeWorks Publisher*, thanks to the folks at Migraph, who have brought you great, useful programs like *Easy-Draw*. Migraph has already written special DeskJet GDOS drivers which have been "tweaked" to give somewhat better performance than the LaserJet drivers. Also included with the 150 dpi and 300 dpi drivers are matching fonts for these resolutions. In addition, you get a "screen dump" program which allows you to do an "alternate/help" screen printout in the normal fashion. This is especially useful if

you don't have the optional Epson cartridge.

A disk containing all of these goodies is now available from Migraph for about \$40. In fact, Migraph also sells the DeskJet printer. I've used the GDOS drivers extensively and they work without a hitch. Note that to use these new drivers and fonts you must have the latest versions of both *Easy-Draw* and its accompanying "Out-print" program. Since Migraph is also selling the DeskJet printer and has taken the time to write custom drivers for it, they are supporting it very well. You can call Migraph for additional information toll-free at 1-800-223-3729. And don't forget to mention that you heard about it in *Current Notes*!

Epson Emulation: While the Epson emulation cartridge works great, and even adds some special features of its own, you must remember that the word "emulation" means "to work like something else." So don't expect that with Epson emulation that your output from Epson drivers will magically print at 300 dpi—not so! It's true that your printouts will look much better all around, but the resolution will be the SAME as with an Epson or compatible printer. It works this way on a laser printer, and it works this way on the DeskJet.

Incidentally, since there is still no Epson emulator available for the Atari laser printer, DeskJet owners currently have another big compatibility advantage. And, unlike the Atari laser printer which can only be used with an Atari computer, the HP DeskJet, because of its built-in, industry-standard serial and parallel ports, can be used with ANY personal computer.

Want to Race?...

While the HP DeskJet won't normally beat a laser printer in the quarter mile, it does produce exceptional print quality that equals any laser printer.

Speed is a relative thing on any printer, and the DeskJet is no exception. Printouts can take from 30 seconds to about 20 minutes, depending on many factors.

Text Mode: Like other printers, the DeskJet uses built-in ROM fonts for fast, text-only out-

put. The printer's rated print speed for such "default fonts" is 120 cps at 10 cpi in letter-quality mode, and 240 cps at 10 cpi in draft mode. The printer can use the built-in Courier font, more than a dozen optional font cartridges which even include big-gun "type-set quality" fonts like Times Roman and Helvetica, or "soft (downloadable) fonts" used with optional printer RAM. You can expect to print a respectable two pages per minute when using the "built-in" fonts.

Draft mode prints at 150 dpi while letter quality mode prints at 300 dpi. Print quality is indistinguishable from even a daisy wheel, and the normal print features like variable pitch, bold, italic, etc. are obviously supported. A friendly printer control panel and easy-to-use, plug-in cartridges with bright green LED's, make using this whisper quiet printer a breeze.

... The printer's rated speed is 120 cps at 10 cpi in letter-quality mode, and 240 cps at 10 cpi in draft mode...

Graphics: Here is where the DeskJet really shines! It does full-page bit-mapped graphics at 75, 100, 150, and 300 dpi. Margin space around your page at 300 dpi is the same as for a laser printer. You can print as close as a quarter-inch from the edges of the sheet which gives you an effective image area of about 8 x 10 1/2 for a letter size sheet.

The time it takes to print a full page of graphics depends on many factors. These include: the program used to create the page, the type and efficiency of the drivers used, what printer language is used, the amount of computer memory available, print buffer size (the DeskJet comes with a built-in 16K buffer and an optional 128K RAM cartridge is available), whether serial or parallel is used (parallel is much faster), the make-up of your page (text and high resolution bitmaps like photos normally take longer to print than simple "objects" like

lines, boxes and polygons), and still other variables.

In general, graphic files which can use GEM output—like *Easy-Draw*—print much faster than programs like *Publishing Partner* which currently doesn't have fast, optimized drivers. The latest release of *Publishing Partner Professional* (which may not be out till summer) is supposed to ship with "enhanced" drivers for the HP LaserJet/DeskJet printers that reportedly will speed up the current version by as much as 40%.

Average times for *Easy-Draw* at 300 dpi run about 3–5 minutes per full page. While *Publishing Partner* averages about 10 minutes per full page. But "small" layouts in *Publishing Partner* have printed out in as little as one minute, while "heavy" full-page layouts have taken as long as 20 minutes. (The 150 dpi drivers are used for fast proofing, and print out in about half the time).

Note that the DeskJet only has to make one pass per line regardless of resolution or mode. For 300 dpi it just "blows" more dots onto the paper in the same pass. This is a far cry from my "old" dot matrix impact printer that must make as many as three passes for so-called "high rez" output.

Zapping A "Myth:" Most people probably think that laser printers are always "lightning fast," but this is simply not always the case. This probably has to do with the word "laser," which conjures up images of instantaneous light beams shooting everywhere. It's true laser beams are fast, the problem is that they must first be given the "directions" to know where to go. Laser printers (just like the DeskJet and dot matrix impact printers) must first change the printer language used by the software into a bitmap (this process is called "RIP," or "raster image processing"). This is a complicated process which can take a long time to accomplish, since at 300 dpi, the computer must map over 7 million pixels for a full-page graphic! Depending of course on which printing language is used, and other factors, it can take even a \$5,000 Apple LaserWriter using Postscript (no speed demon itself) over 15 minutes to create a rasterized image in memory. So, as you

can see, it always takes additional time for each different page to print on a laser printer. Once the image is created however, a laser printer can then print copies of this "original" image as fast as the printer can physically operate. And for most laser printers, this is about eight sheets per minute.

What all of this means is that while both the laser and DeskJet printer need additional time to process the first page, the laser printer is capable of pumping out additional copies of each page much faster, while the DeskJet takes almost as long to print each copy as it does to print the original. But this applies only to graphics.

All text pages produced with any printer with built-in fonts will print at the maximum speed of the device. Text pages produced with built-in fonts do not need to be processed as bitmaps since the mapping for the character sets already reside in ROM.

To sum up folks, the DeskJet will print, on average, much faster than a "dot matrix" printer, but slower than an average laser printer. Remember that when the DeskJet is printing at 300 dpi, it's printing 90,000 dots (or "pixels") per square inch!

As laser printers go, the Atari laser printer, which uses the very fast "DMA" port, is probably the fastest laser printer around. In fact, it can easily print a full-page from *Easy-Draw* in less than one minute! But don't expect to get this same speed from a HP Laser printer or compatible. Like the DeskJet, these printers cannot be connected to Atari's own proprietary DMA port and must therefore use either the slow serial port or the relatively fast parallel port. Perhaps surprisingly, I have found that in many cases the DeskJet has actually been faster than some laser printers!

I've Always Said: "That if I only had a printer that would give me beautiful typeset quality, I wouldn't care so much about how long it took to print out." Well, the DeskJet is just that. Since I use it strictly for commercial typesetting, I'm only concerned about getting ONE, good, "camera-ready" page for later reproduction by offset or copy machine. If you need a printer for a large office where each sheet must be printed in multiples, or you

need a printer that can be connected to a network of users at the same time, then the DeskJet may not be for you. But if you're like me and just want to produce fine "originals" and will be using the printer just yourself, then the DeskJet may be just the ticket. The DeskJet is advertised as a "personal printer," and for that purpose it is well suited.

Dots of a Different Color...

It is important to understand that the "dots-per-inch" produced on low resolution, dot matrix ribbon printers OVERLAP. So even though your printer may be rated at "240 dots-per-inch," this is not really accurate. All high resolution devices like the DeskJet, laser printers, and higher output devices like the Linotype digital typesetters produce dots which are SIDE-BY-SIDE, and these dots do NOT overlap! The DeskJet, like other "high-end" printers, produces clean, sharp, and accurately positioned dots. If you wish to check this out for yourself, just use a good magnifying glass or jeweler's "loop" and compare the output

... Practically no other company supports their products as well as Hewlett Packard ...

from different types of printers. To some of you, this may sound like a minor issue, but the print quality from these different printers "speak for themselves."

Incidentals...

Easy Set-Up: The DeskJet comes attractively packaged and easily sets up in a few minutes. In fact, you probably won't even need to look at the beautifully printed documentation that comes with the unit! Just unpack it, plug your ST into the parallel port, pop in an ink cartridge, flip the switch, and start producing beautiful, whisper quiet output that rivals anything you may have seen before. The DeskJet is the easiest printer I've ever set-up and used!

Excellent Support: Practically no other company supports their products as well as Hewlett Packard. From the moment you open the first-class packaging that surrounds your DeskJet, you are literally "awash" with support from toll-free phone numbers and local and international service personnel available around-the-clock.

Reliability: The DeskJet has an excellent reliability and estimated usage rating ("MTBF"—mean time between failures) of 20,000 hours. 2,000 hours power-on and 12,000 printed pages per year, or about 50 pages per day average use. Replaceable, non-clogging print cartridges cost about \$17 each and are fully guaranteed. The printer comes with a 1-year "no-nonsense" guarantee against parts and labor.

The Bottom Line...

The DeskJet has the same resolution and virtually the same ability to accurately print "dots" onto paper as a laser printer. Thus, the DeskJet's true potential to produce top quality output is virtually dependent upon the capabilities of the software to generate and produce precise fonts and graphics. This is made especially evident by closely comparing pages printed on various laser printers that use Postscript, HP PCL, GEM "meta files," and "proprietary" schemes used by programs like *Publishing Partner* and Apple's own "Quick-draw." While all of these methods are capable of great output, they ALL have their own strengths and weaknesses. An in-depth comparison of these methods may become a future article, but for now I think that it's sufficient to simply say that all of these methods—whether used on laser printers or the DeskJet, are capable of superior output. In short, IF you think that laser output looks better than DeskJet output, then perhaps you should blame the software—not the DeskJet!

But enough said! If you would like a free color brochure and additional information about the new HP2276A DeskJet inkjet printer, you can call HP toll-free at 1-800-752-0900.

Happy Printing!

Graphics Operating Environment Merrill Ward's New "ST Junior"

An interview with Shelly Merrill, President of Merrill Ward

By Len Poggiali

Recently I had the opportunity to speak with Shelly Merrill, president of Merrill Ward, about his company's new Graphics Operating Environment. This desktop program for Atari 8-bits, which may be operated by using an ST mouse, by joystick, or by keyboard, makes our 8-bits look and function very much like STs (but without compatibility, of course).

*In the following interview, Mr. Merrill not only gave his impressions of GOE but also of the first external program to be developed for it—**Celebrity Cookbook**. Mr. Merrill began the interview with an opening statement.—LP*

The primary reason the cookbook was programmed in that manner within the GOE environment was to show everyone that we do have a developers' package, and that our desktop will be of such a nature that external programs for the 8-bits can be done in this manner. No one believed that a desktop for the 8-bits would ever be done. The primary myth we want to address—that everyone has given up, and it is alarming. This is why we took the time to put our desktop on our cookbook program. We were not initially going to do that. We were just going to give you an 8-bit version. It resulted in a three-month delay, finalizing our compiler just for that program. We finished our developers' package before we finished our desktop package.

What specifically is your background?

I came from t.v. I was president and chairman of the board of Delaware Public Television. I built their station in cooperation with WHYY, Channel 12 in Philadelphia. My other associates have been in advertising and public relations for some time now. We do the Bob Hope Theatre Program here in Palm Desert, which is our equivalent of your Kennedy Center back East. We also publish three or four magazines, and we license materials that we feel would be appropriate for the home computer market that have not been done before, and that had been successful in magazine print in terms of wide public interest material rather than just the gamey-type stuff that had been associated with home computers. The Celebrity Cookbook was put together by my partner, Diane Ward, who used to write for newspapers and magazines, and still does from time to time. She felt there was a definite need, that there was not a comprehensive catering program for the home for individuals to try materials to throw successful dinner parties. The celebrity recipes are unique in that they are collected by the celebrities from all over the world, and they are their favorite recipes, and the recipes that they use when they are holding dinner parties. We also have a wine guide and a bar guide and party tips on there.

How did you go about getting their recipes?

There have been several celebrity

cookbooks written over the years in various areas, and we simply licensed their materials from press agents and so forth. A lot are donated to us from the celebrities, something they wanted to do in terms of their own interests.

What is your experience with the Atari computer?

The Atari is interesting in that our company was born of IBM and Commodore. We left-handedly walked into the Atari field as we went through the process of gathering about us different programmers. We gathered several pretty top-notch Atari programmers that are also doing IBM and other things for us, and they suggested that we support the Atari market. Of course, we support the ST with the cookbook program because we produce the fastest word processor for the ST on that editor. And then we decided we would get into the 8-bit area. We would be toying around with the desktop for some time on other machines, and we looked into putting it onto Atari because there was a definite lack of one there. It is kind of been a hobby/tragedy/full-time endeavor.

Tell me a little about the history of that.

That program had been under development since 1986. We would work on it and work on it and then go work on something else and then come back to it.

Was this in your offices in Palm Springs?

Merrill Ward and our associates are a consortium, a little like Electronic

Arts. What we have is a group of people involved with us with their own separate companies, and we are in charge of the consortium. Everything funnels through Merrill Ward: the development, the design, we all get together and decide what it is going to look like and agonize over whatever compromises we have to make to meet our standards, which border on perfection.

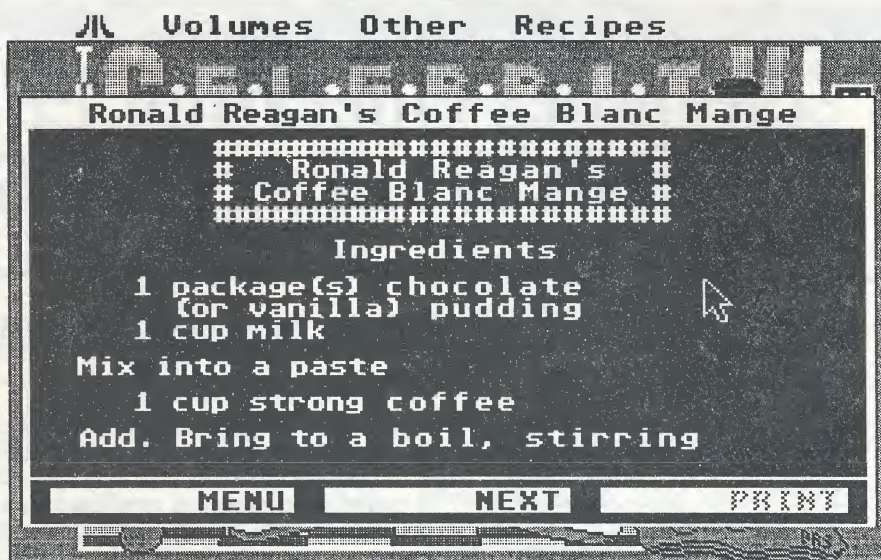
How many people are we talking about?

We have got roughly ten separate organizations involved. Some prefer to remain anonymous. I can not tell you who provides the venture capital. The programmers come and go. We own the copyrights. We are ultimately the ones publishing, developing, and generating the projects.

You were talking about skepticism out there.

This is the result of a poll. We have as part of our organization a tele-marketing organ, and we retained them to conduct a telephone poll of users groups, retailers, and individuals. I have done a lot of personal polling to ascertain exactly what the state of the Atari 8-bit is in the eyes of the user. We already have an idea of what some of the bigger companies are saying about it. It ranges from, "We will do it reluctantly," or, "We will not support it at all," to companies like ours who say, "We are going to support it". It is alarming to us that the user appears to have given up, and we found a lot of occasions where they would not even go back into the retail outlets because the software support does not seem to be there. There are no new titles; nothing is happening; it has lost its energy. We believe firmly that this need not be the case. That is why we are going forward with our desktop, even though we chose a catering program to introduce it with.

Are there any special reasons you decided to start with a catering program?



The reason we did that is because of the text-based involvement with that program. The data bases are enormous on that program—about 1/2 million individual characters if not more. For any 8-bit computer to be worth its salt in this market of changing times it has to be able to manipulate vast amounts of text. Of course, our desktop has to be able to do that as well. So the cookbook, given the enormity of the program, was the perfect challenge. It is very important to us that our programs run on 48K machines. The program and the desktop will run on everything, even the game machine. So we are not leaving out anybody. We do not like the word "orphan".

What will the desktop do?

We call it a Graphics Operating Environment. It gives you a visual display rather than something called DOS. Once a lady told me, "I do not speak DOS-ee. I speak English. I do not type either." 65 percent of America does not type. The mouse-driven desktop is designed to allow for everyone to use a computer system without the necessity of learning how to type.

What programs will be in the basic package?

The basic package will include a desktop program that will give you all DOS functions that you have

now. It will be Atari ADOS, the new DOS which we hope will be hard-drive supported. The program is being written on a hard drive, though we can not support a hard drive right now. The cartridge will fit on the back of the computer. It is intended to stay there to allow users to use their disk drives to load all existing external programs. Generally what it is is an environment to run software in. It is also an environment to utilize all the DOS functions that you are now using. We also have sorting programs designed for it. We have fonts, an icon editor, paint program, word processor, and a calculator; it is a complete disk.

Suppose you want to load a non-GOE program?

If you load in a piece of software and click on the disk icon twice, you will get a directory, and you can boot it from there. It is just like the ST, only it is an 8-bit version. Also, we are not robbing the memory of the computer in any way because the program's on cartridge.

How does Atari, Inc. feel about all this?

Atari is very eager for us to complete the project. We are very eager. At this point I expect full cooperation.

How would you compare GOE with GEOS?

From the standpoint of the Commodore 64, GEOS is an excellent program. GEOS does not support the VIC-20, though. What we have done, since Atari elected to put out a 48K machine as well as 64K and 128K machines, is to run on all of them. We also think it is better because it is not a disk program. I think it is cleaner and more convenient to do it that way. Also, we have better memory management on ours. When you load GEOS on the 64, you are real close to being out of memory.

How sophisticated compared to some other programs on the market are your word processor and paint program going to be?

Extremely sophisticated. The recipe filer on the cookbook is a good example. If you go into the editor, you will see that we windowed everything. You will see that you are clicking on files to load them, to delete them, to rename them, to whatever you want to do to them. You are reading them off disk without loading them, which is a form of multi-tasking. If you have a file in our editor of that filer, and someone comes in and says, "Remember that letter you wrote to Joe Blow?" you can say, "Just a moment, let me get it for you," and you can click on the list feature, which will list it out, and you can print it and go right back to the editor and continue typing. So we have done a lot of things on there. Just as a word processor it is state of the art. We have cut-and-paste, search-and-replace. And we have simplified it. We have line centering. We have create columns. You can set your margins with your tabs. As long as you do not press Return, it continues to stay in the same spot. The only thing we did not finish on the 8-bit cookbook, because it is the recipe filer (simply recipes and short letters), was to disable the wordwrap on insert, but that is real easy to work with.

That's for the cookbook but not for the word processor on the desk-

top?

The actual word processor is a full-functioned word processor with everything: left-right margin settings; about eight different fonts to choose from, different styles and sizes; bold face and underlining; the whole nine yards. I mean everything that Paperclip had on it and then some. We believe that it will be one of the best ever produced on the Atari, if not the best. We are going for the best.

The Celebrity Cookbook has been out for awhile?

Nope--January. We've only shipped the 8-bit as of mid-January. The new Mega-ST version is out now.

Are you into Volume 2 in any of your systems yet?

On Volume 2 we are well on our way. On Atari they'll be a delay because you cannot run Volume 2 without Volume 1. That's why the price is so much cheaper on Volume 2--\$19.99. \$34.99 on Volume 1. You get your editor, your wine guide, bar guide, party tips, and celebrity diets. On Vol 2 we have our sorter where you tell the program what you have available in your cupboard, and it gives you a recipe if it has one on the disk that's suitable for it. We also have a weight and substitutions table. If you buy all six volumes, you will have every piece of information anyone would ever need to cook (101 uses of salt, for instance). Our researchers have been hard at work at everything. Of course, in Volume 1 we tried to put in the programs most commonly used. Each program will have 50 celebrity recipes divided as Volume 1 is. We are moving right along.

Anything else you would like to add?

I know that there's a lot of interest for this desktop. We are more than willing to send anyone a demo disk for \$5.00 which will come right off the price. And whoever buys the demo will get the program first. Or, if they would rather not buy the

demo but would like to see what we are talking about, they can go to Federated or any other Atari outlet and take a look at the cookbook. And they will be getting a fine program for their money anyway--the only home catering program on the market and the first external program from the desktop.

In the future do you see yourself doing the sorts of things that are being done with GEOS (coming out with other GOE-compatible programs)?

What we have done differently than them is that we decided we were going to publish the desktop and the developers' kit at the same time, or one shortly after the other. We are not holding onto our technology. We are sharing it with other developers. We are in it to make money, let's not kid ourselves. Of course, we can not supply the world with free software, but if our desktop is any good, they will buy it; if it is not, then they will not buy it. We have mastered the thing to the point where nothing could conceivably be wrong with it that can not be fixed. Try the resizer. Have you noticed that dashes will go to cups? Tablespoons will go to quarts. Have you noticed that the dry ingredients are limited to cups only? You don't have a gallon of salt to deal with. 999 servings and you get an awful lot of cups. That's true in the editor for your own recipes as well. We are not just changing the numbers. We are going from teaspoons to table-spoons to cups to quarts to gallons with our own algorithm. You can put the price of the recipe at the bottom, and that will go up and down as well. If you have a recipe for steak that on average costs you \$3.00 to prepare, and you love it, and someone calls you to cook the steaks for twenty, and yours is for two, you can find out how much all twenty need to kick in for this little party. You can also put our wines on the wine guide, and price those out too. That way you can get a good idea what your little night out will cost you.

KEEP THE GOOD STUFF COMING

NeoDesk, Tempus and other goodies

by J. Andrzej Wrotniak

Not so long ago some software companies on the Atari ST market were spending lots of money for advertising products which did not work, and enthusiastic reviewers were raving about great programs which were *sometimes* performing as advertised, *usually* crashing not more often than once an hour.

Some publishers, however, are switching to the unorthodox way of making money: by devoting more attention to writing (or distributing) good programs. Hard to believe, but this may even become a trend. A complete reversal of sound business practices? What is going on here?

Here are some remarks on the programs which recently attracted my attention and which, I think, deserve attention in the ST field.

NeoDesk:

A Clean, Mean (But Not Lean) Desktop Machine

After having heard a lot of gossip about this supposedly great program, I decided to see it with my own astigmatic eyes. One phone call and four days later it arrived in a plain brown wrapper, raising my secretary's eyebrows.

NeoDesk is written by Mr. Dan Wilga (have you seen his Public Domain *MemFile!* sector editor?), and Mr. Wilga seems to take pride in his work. Here he is again, saying "Look, guys, here is how things should be done", and putting his programming skills where his mouth is.

In brief, *Neodesk* is an alternative desktop for the ST. When you run it, the regular desktop with familiar windows and icons disappears, being replaced by—yes, you're right—*almost* familiar windows and icons, behaving as you would expect. You can run other

programs from it, do operations on files, format disks, display files—yes, this *is* a desktop.

No big deal? Wait. There are dozens of features in *NeoDesk*, which you will soon start to appreciate and enjoy, wondering how could Atari have left them out, and how could you live without them.

Almost all menu entries have keyboard alternatives. File icons are always rearranged to fit the window width. Disks can be formatted in various standards. File copying leaves the time stamp unchanged, and file operations can be aborted at any point. The file template at the top of a window can be modified so that only files matching it will be displayed. Selecting any group of files will display their total size. The list goes on and on, and I will skip over some more advanced—and less frequently used—points.

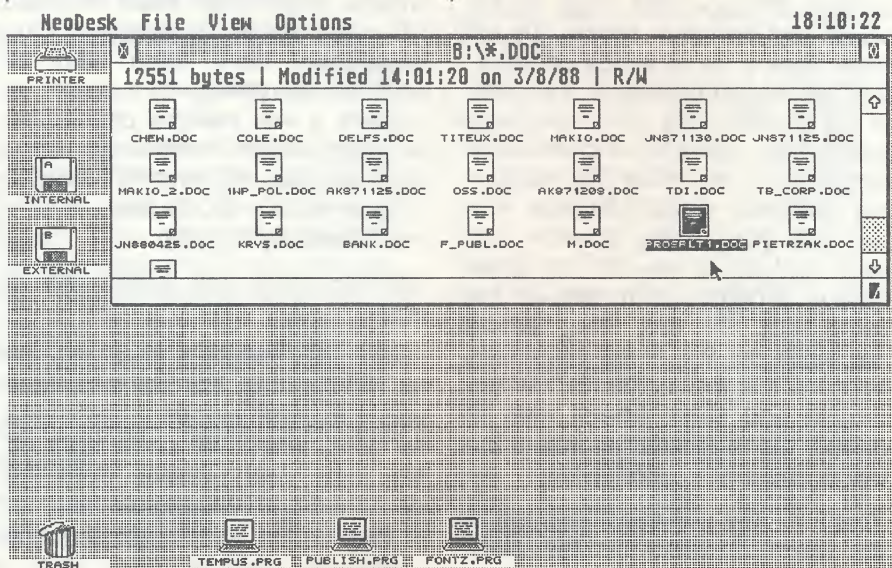
My favorite feature is the possibility of dragging programfiles from their windows to the desktop. When the window is then closed, the program still remains acces-

sible for execution, as long as the floppy disk—if it is a floppy disk—is not removed from the drive.

Hard disk users will love this option, as the desktop configuration can be saved to disk, so that these selected files will be available upon bootup. Have I mentioned that *NeoDesk* can be auto-executed (STARTGEM, a public domain program, is included) when you boot your machine? You may have all the most frequently used programs on the desktop at the same time, without opening, closing and resizing windows. Some people may want to buy *NeoDesk* just for this single feature.

If you do not like *NeoDesk's* built-in icons (or the desktop pattern), a custom editor is enclosed—suit yourself. Designing your own icons can be more fun than some of the games I've seen.

The program seems to work without glitches. Mr. Wilga adheres to the old-fashioned (and, of course, economically unjustified) principle of debugging a program before selling it. Some people



never will learn from the industry leaders.

Yes, I would like to see some minor changes to the program. I am missing the "Show As Text" display mode, the real "Sort By Type" option (in addition to the modified one) and the possibility of declaring executables by any extensions I choose. All these features are available in the standard GEM desktop (the last one by modification of the DESKTOP.INF file), and not much space was gained by leaving them out.

Also, file copying on a one-drive configuration is not really improved, still requiring zillions of disk swaps the same way as the standard DRI desktop does.

The main disadvantage of *NeoDesk* is its size: almost 150k of your precious memory. For the 520ST owners this is a major limitation, which may make a difference between a very useful utility and just a nice conversation item to impress your friends (one of my friends, a Macintosh owner is still there with his jaw hanging down). The same is true when you work on a 1040 with a half-mega-byte RAM disk. However, you may always exit *NeoDesk* to the regular desktop, reclaiming all this memory, if you need to. One may also hope that future versions of *NeoDesk* may be trimmed down by 30-40k, which may be a significant difference.

On the other hand, those of us who use 1040's or Mega ST's, will never regret \$30 spent for the *NeoDesk*, and for the hard disk owners it is a must.

If the Atari Corporation wanted to improve the ST user interface significantly without spending too much money, they should just buy the rights to *NeoDesk* (possibly ordering some modifications), burn it into ROMs and install it into every machine sold. But they seem to be too busy building prototypes of new computers, incompatible with the ST line (of course: who cares about my software investment?), to be available some year in the next century.

Desktop Publisher

From GST/Timeworks

I am *not* going to write a review of this product. The *Publisher* deserves an in-depth review, which I do not feel qualified to write; on the other hand, the new look of *Current Notes* is a proof that the program works. Every serious ST user I know already bought a copy before any advertising appeared in the press. The power of the grapevine.

Without any previous experience in desktop publishing, in less than an hour after opening the package I was able to format some old text files into columns and boxes, mix various fonts, paste, crop and resize *Degas* pictures, and do other things previously out of my reach. Does the program need more recommendation?

Being generally a very good and solid product, the *Publisher* has some flaws. Three points of criticism come into mind:

Design. The feature I miss most is the possibility of *exporting* a text unit ("story") back into a text file. In some situations (after modifying the text from within the *Publisher*) it can be very desirable.

Implementation. The program sometimes crashes (I sus-

pect the text editing at the reduced-size viewing modes, try to avoid doing it). Resizing of the pixel-mapped images sometimes works in an unpredictable fashion (no lasting damage here, though).

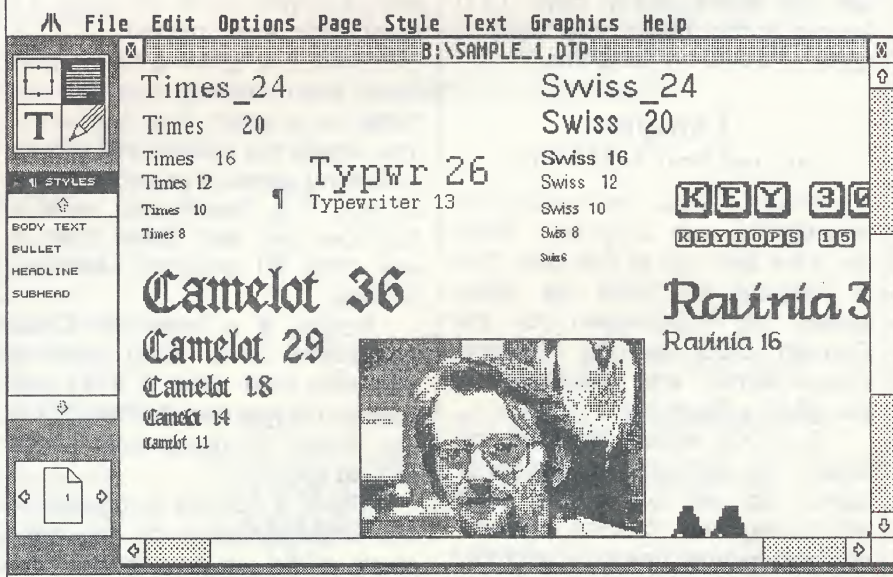
Documentation. The manual is suitable for a *very* inexperienced user, but it makes a much better impression before you read it than after. Basically, it contains almost nothing not included into the on-screen help. Not a single word is uttered on how you install your own fonts, what are the principles used by the program for font choice and substitution, etc. With experimentation and patience many of these questions can be answered, but not all. I would gladly pay \$20 extra for a detailed technical manual.

In spite of the above, the program is goooooood. This may be one of the hottest sellers of 1988. Available for \$80-\$100 (discounted) it is a bargain, too. Go to your dealer and do not come back without it.

Fontz!

The Publisher's Companion

This program was reviewed in depth by Milt Creighton in the May issue of the *Current Notes*. Once again: everybody knew about *Fontz!* without any advertising



before the program was ever available.

I found it very handy in cleaning up, modifying and adapting a new set of fonts for the *Publisher*, and the accompanying manual answered many questions I was always afraid to ask. The program is nicely designed and clean; I have yet to discover any problems (other than crashing at the attempt to read an illegal file). The documentation is brief, complete and useful.

One may predict, that a majority of *Publisher* users will end up buying *Fontz!* as well; selling for less than \$30 it is a very good buy. If the author, Mike Fulton, decides to write a font librarian, I am already looking forward to it.

GEMFED

A Public Domain Alternative

If you cannot afford to buy *Fontz!* or do not plan to do much font-related work, you may want to try *GEMFED*.

This program by Brad Christie has been around for a while. It allows you to access, modify or design GDOS fonts. No, it will not translate fonts from other standards (as the Macintosh ones), but otherwise it will perform most things *Fontz!* does.

Early versions had some bugs, but the recent one (I have 1.11) seems to be clean: I've used it quite a lot with no problems.

Tempus

Fast and Neat Text Editor

Finally, I would like to call your attention to one program I really like a lot and use all the time. This is *Tempus*, an ASCII file editor written by M.Schuelein for the German CCD (of the *Personal Pascal* fame), and distributed in the USA by Eidersoft.

An ASCII editor? No fonts, no styles, no pictures, no columns? Come on, we are talking word processing and desktop publishing, and here comes a product that

just can be used for creating plain ASCII files? Is this enough of a reason to make all this noise?

Yes! For many of us (mostly programmers, but not only) a text editor is the program with which we spend more time each day than with anything else, and *Tempus* can save you a lot of inconvenience and irritation.

First, it has a plethora of functions. Four text windows, half-height text mode, powerful block, search and replace functions, everything you would expect from a powerful text editor, and more. Some of the functions you may seldom use (e.g. printer translation files, redefinable function keys, cross-reference listing), but never do they obstruct or interfere with the basic operation. And, of course, everything is accessible from the keyboard (in addition to the menu bar).

...Tempus is lightning fast.

I have never seen anything even come close, on a micro or a mainframe....

Second, all of it is implemented in an extremely convenient and elegant way. Looks very clean, behaves like an angel, and in a year or so of using it I have never, ever crashed.

Third, it is lightning fast. I have never seen anything even coming close, on a micro or a mainframe. You would not believe this screen redrawing speed is possible, blitter or not. The search and replace functions are also faster than in any other ST program. Just incredible.

Fourth, it is addictive. Once you switch to it, using anything else is a pain. Give it a try and there is no way back (although it is not cheap at discounted prices around \$30-\$40).

There is nothing to criticize in the implementation of this program; in the design area few im-

provements may come to mind. The feature I am miss most is the possibility of redefining the key bindings for the editor functions, but this is a complaint I have about every editor or word processor on the ST.

In the meantime...

While others are coming up with new hardware or software, Apple is running around and suing everybody in sight for the "Macintosh look and feel" in their programs (the said "look and feel" did not even originate in their products, as Xerox was first here). There are two ways of staying ahead of competition on the market. One is to develop better products, and the other is to disturb others trying to develop better products.

What Apple does is just pathetic. The next thing they may want to do is to claim rights to the rectangular shape of the computer screen. The outcome of this legal squirmish may influence very significantly the next few years on the microcomputer field, and we may be also affected by it.

Distributors of the products mentioned:

NeoDesk: Gribnif Software, P.O.Box 350, Hadley, MA 01035.

Desktop Publisher: Timeworks, Inc., 444 Lake Cook Rd., Deerfield, IL 60015, (312)948-9202.

Fontz!: Neocept, 908 Camino Dos Rios, Thousand Oaks, CA 91630, (805)498-3840.

GEMFED: available on GENie, CompuServe, many bulletin boards and on the *CN Public Domain Disk* No.127.

Tempus: Eidersoft USA Inc., P.O.Box 288, Burgettstown, PA 15021.

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LDW BASIC is a powerful, integrated programming tool that lets you edit, compile, and execute your BASIC programs without exiting to the desktop. It also creates a program file which can be executed directly from the desktop. You will never have to load the BASIC language interpreter or run-time module to execute your program.

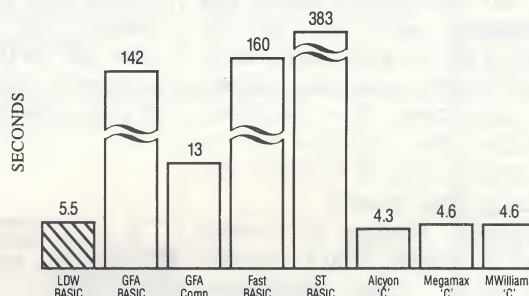
LDW BASIC Rev. 2.0 is very easy to use, yet it's more powerful than any other development system for the Atari ST. It supports a full set of high level GEM access statements and functions which let you:

- Create and use your own windows, menus, dialog boxes, buttons, edit fields and check boxes.
- Use desk accessories while running your BASIC program.
- Design your own mouse pointer shapes and icons.
- Trap GEM events.

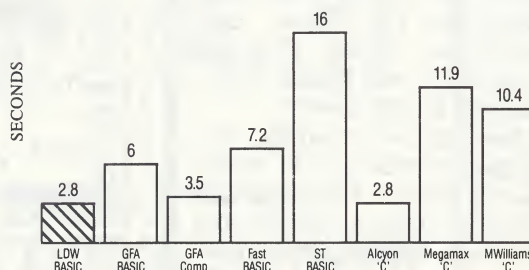
You get all this and much more. No more PEEKs/POKEs to access GEM. Among the supported statements are: ACTIVEW, ALERT, ASK FILE, ASK MOUSE, BOX, BUTTON, DIALOG, DRAW ICON, EDIT FIELD, EVENT, INFOW, MENU, MOUSE, ON DIALOG, ON MENU, ON MOUSE, REDRAW, TITLEW, WINDOW and about 40 more new statements.

LDW BASIC Rev. 2.0 is a stand-alone development tool, but it can also compile any program written using the old ST BASIC interpreter or the new ST BASIC interpreter. It is also functionally compatible with BASICs for the Macintosh.

Compare the following benchmarks and see why LDW BASIC Rev. 2.0 leaves the competition behind!



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AWARD MAKER PLUS

For Awards With A DIY Twist

Review by Bill Moes

We all know how important it is to show a little appreciation to those around us. Everyone likes a little recognition. Maybe a smile will do. Or perhaps we say a word or two. And when we need something more tangible, something that will last longer than a moment's memory, ST users have no shortage of possibilities.

Award Maker Plus, a recent release from Baudville, has awards and certificates for many occasions. Nothing surprising there, right? And, yes, we've already seen another product, *Certificate Maker* (CN Sept. 1987), do the same thing. But wait: *Award Maker* goes another step. And it's a step that should appeal to do-it-yourself fans everywhere.

In addition to the software's 10 built-in award borders, you can design you own. And if you're not really excited with any of the illustrations on the standard awards and certificates, you can, again, create your own. This program, then, offers the potential for an infinite assortment of borders and graphics for your awards.

Options. Putting an award together is simple. You'll choose: award style (286 available, although many are merely slight variations); title font (4); title text; name/text font (4); name; text; signature; date; border style (10 plus your own); and border color, for those with a color printer.

Of the 286 award styles, four generic awards allow you to import your own pictures. These picture files must be Degas format, but can be any resolution (low, medium, or high). A name list can be used for multiple awards. Drivers are supplied for many dot-matrix printers and the adventurous may even alter a driver. The program runs on either a color or monochrome monitor.

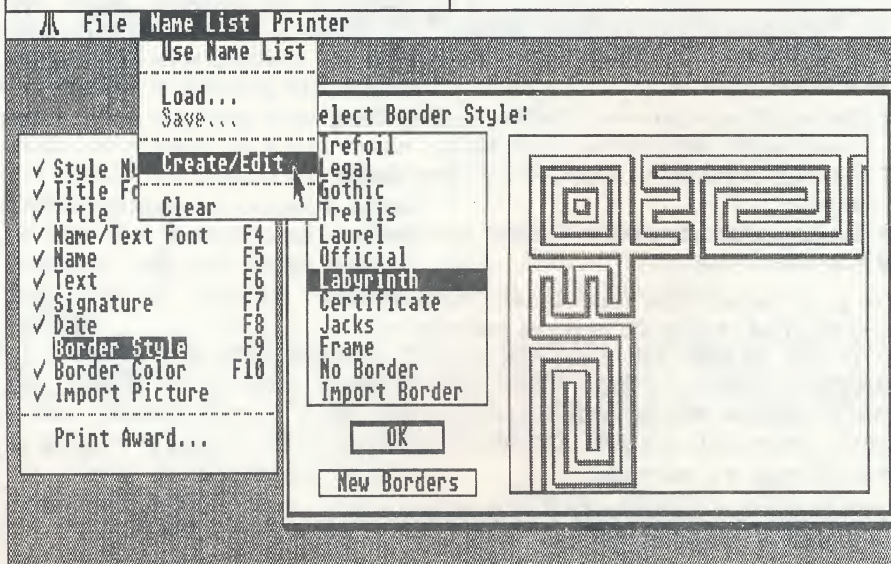
After you've typed your text and finished with all selections, you're ready to print the award. If you want to see what it all looks like first, preview it. One view will show the full award at a smaller view. Click on the GEM window's full-box and you'll be able to see a magnified image. This full-screen window is especially useful when you're using your own borders or graphics and you want to make sure it all looks right.

Borders and Graphics. Creating a border, especially the first one, is not easy and the documentation's explanation is both wrong and very insufficient. A border uses a 60 X 120 pixel section. (I successfully used a 60 X 121 area. A Baudville spokesman said that a slight variation may be necessary due to the way *Degas Elite* is used to pick up the image.) The border section you draw will be the top left corner and a straight section. The lower half of your drawing will be the straight

section to be repeated along the sides. The top left corner will be turned to fit the other corners. Borders must be created with *Degas Elite*, medium or high resolution, and saved in *.ICN block format.

I spent several hours putting my first border together and it took a lot of tedious pixel-by-pixel work and much switching from *Degas* to *Award Maker* and back. It seems best to make your first border a simple two-line frame. Once that simple border is correct, you'll find more complicated borders to be easier in design.

It's very important to carefully count pixels as you put your design together. A mistake in counting by just one pixel means your border may not match up as it goes around the award. *Degas Elite's* magnification mode is very useful in this process. It's somewhat demanding, but designing your own borders does work and it offers some exciting possibilities in



Menu Screen from Award Maker

creating awards. It's too bad Baudville didn't include a template screen and some suggestions for creating borders. Border design, a bit of a challenge, will probably only be used by a few brave, and persistent, souls.

Including your own graphics, however, is simplicity itself. Just click on "Import Picture" and then the file name. Any non-compressed Degas format file can be used. *Award Maker* will then convert the image to high resolution. You may need to adjust colors first as dark backgrounds can obscure the graphics. Be sure to preview your award in magnified mode before you make any final judgments.

Documentation. The ST-specific eight-page brochure gets you through the options. A separate 32-page booklet shows the various font, border, and award

styles available. The award styles include those for academic, family, sports, humorous, and general topics.

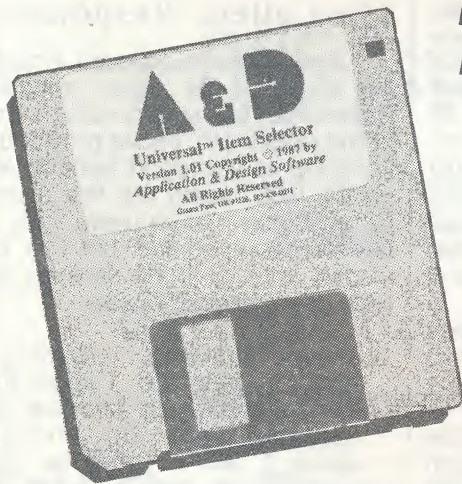
Negatives. Documentation claims the two-disk package supports two drives. Not so. You'll need to pull program disk "A" and insert library disk "B" in your boot drive. A second drive can be used, however, for your own data disks. Also, unfortunately, you cannot preview your award until you've gone through all the options, although this does give the program a speed its competition lacks. *Award Maker* doesn't offer much in the way of canned humor and the software is copy-protected.

Comparison and Summary. The ST now has two major players in this specialized market, both easily used. The first, *Certificate Maker*, includes many humorous

awards and has a supplemental disk available to increase the certificate topics. This is one for those who want a good collection ready to go.

Award Maker Plus (\$39.95) offers a reasonably complete certificate collection. Especially noteworthy are the exciting and creative opportunities for personalized borders and illustrations. Once you get through the initial detail work in setting up that first border and think about the possibilities with your own art, clip art, or digitized pictures in those borders and certificate illustrations, you'll begin to appreciate the capabilities of this one. *Award Maker*, a program that deserves the Plus.

[Baudville, 5380 52nd Street SE, Grand Rapids, MI 49508 (616) 698-0888.]



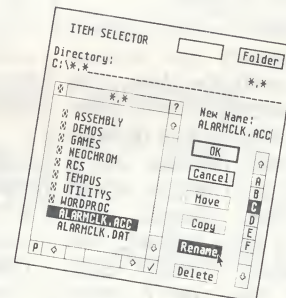
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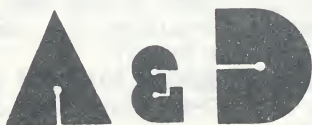
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The Telecom Dream:

The Nite Lite Multiline BBS Running on one ST

Review by Ed Seward

For several years quite a few members of the Atari community have been asking for a multiline BBS capable of running on an ST. In March, NOVATARI purchased the Nite Lite Multiline BBS which provided the required interface and software. This was followed on April 17th with the combining of the ARMUDIC BBS and WAACE ST BBS under the ARMUDIC name. Thus, instead of running two separate BBS' (one for 8-bit Atari owners and another for ST owners) with one phone line each, we now have one BBS with four phone lines running on one ST system. (The interface we are using will allow up to seven lines.)

Nite Lite BBS software

The Nite Lite Multiline BBS software comes on two single-sided disks with two manuals. One disk contains the executable files and the other the Personal Pascal source code to the programs. The smaller manual covers the interface commands that are available and the bigger manual explains the setting up of the BBS and the many commands that are available. (One of these days I'll have to read the smaller manual.)

With most BBSs one gets a generic set of menus. No menus, however, come with the Nite Lite software. The flexibility of the program, of course, allows the operator to build his own menus, but a few sample sets of menus would help certainly help people who have never run a BBS before. I've set up BBSs using *FoReM*, *BBS Express ST* and *Nite Lite*. It takes longer to set up a Nite Lite BBS but that is due entirely to the greater freedom given the sysop.

I will just mention some of the features of the Nite Lite BBS program. It would literally take a book to cover 88 commands available to the sysop to control various aspects of the BBS. Note that these commands do not include the built-in commands such as

those used in the chat, file and message areas. The sysop has TOTAL control over the menu structure of the BBS. Of course, the sysop will have to write his own help files for his BBS since the help file contents will be determined by how the sysop sets up the BBS.

An example of the flexibility of Nite Lite is the handling of the various file and message areas that can be made accessible. For ARMUDIC, I have the message bases divided into three areas. The main Message Menu has three message bases with commands to call up the menu for the 8-bit specific message bases and ST specific messages. The main File Menu has the upload commands, the commands to access the 8-bit file areas as well as the ST file areas. I could just as easily have had an 8-bit only menu under which the 8-bit file and message areas would be accessed and a similar set up for the ST users. I could also have had individual menus for accessing just related file and message areas, say the Magic SAC message base and file area on one menu, an Adventurers message base and file area on another menu, etc. In fact, you could use all these options on one BBS although that would make it a little messy for the caller.

There is a chat room for all the callers to get together. You can also link several Nite Lite BBS' for a 'Linked Chat Room' where everybody on each linked BBS can chat with everybody else. There are 36 access levels allowed with each level being shown a different main menu. I use this capability to provide the club presidents with their own private message base which is accessed from the main menu that they see.

The Weak Points

There are a few areas of this package that could use a little

work. First, there is the part of the manual dealing with the initial setup of the BBS. I found a couple points relating to initializing the message area open to interpretation.

Second, all message bases are kept in the same batch of files. Under this arrangement, a few very active message bases can cause messages in the slower areas to scroll off. I have not had a problem with this yet, but I feel uncomfortable with it.

Finally, there is the file area. The only transfer protocol supported is straight xmodem with checksum. The other areas of the BBS have quite a few commands to allow a tremendous amount of flexibility and the file area is on the bare bones side right now.

The Callers' Response

Joe Waters suggested including some of the users' remarks. Rather than just summarizing some of the responses, I have provided a sampling of the logoff remarks left on the BBS during our first month of operation. There were only a few negative remarks but I've included most of them here for the sake of a balanced review.

☛ **Trevor Williams**, 11:24:55 pm Apr. 21, 1988: Ed, I know that this has been said, and that you probably can't do anything about it. But it would be very nice if the system could tell users if there are any messages in a particular base or not. At least it lets you hit return to see the new messages. Also, in the file section, is there a way to see just the new files.

☛ **Steve Steinberg**, 01:07:20 am Apr. 22, 1988: Would like to know why this board is in ASCII if its an Atari board?

☛ **Scott Robinson**, 01:18:14 pm Apr. 22, 1988: Very nice, and fast!

☛ **Tim Bladen**, 03:52:06 pm Apr. 22, 1988: I think this is an

improvement over WAACE [FoReM ST]. A lot of nice features chat mode, all atari users together again, and faster response plus multiline.

⚡ **Ken Jacobs**, 02:39:08 pm Apr. 25, 1988: Definitely will take getting used to. Structure is quite different than FOREM. Also getting a lot more line noise than I used to.

⚡ **Herb Goertzel**, 08:06:24 pm Apr. 27, 1988: I can't say that I'm particularly fond of this BBS software. Is there any way to just list the files that are new instead of having to peruse the entire list and is there any way to have the file descriptions available as well as the file names?

⚡ **Alexander Giannini**, 04:59:49 pm May 3, 1988: I really like the feel of the BBS.

⚡ **Alexander Vachon**, 12:30:03 am May 6, 1988: I like this board better & better.

⚡ **Brian Merrell**, 08:23:46 am

May 9, 1988: I liked your other BBS system (FoReM ST) better.

Sysop's Response

Paul Swanson (Nite Lite Systems) has been very helpful in answering my questions and still working to improve this great package. He has made several sets of command interpreter files available to registered sysops--the best example being an interactive multiplayer game. I feel that the Nite Lite multiline BBS software is a great package and recommend it (with the required interface of course) without hesitation.

Hardware Required

The hardware I mentioned above very briefly is being made and sold by Nite Lite Systems also. There are two types of interfaces available at this time--the SPP408 allows for up to three

phone lines and the SP808 allows up to seven. One of these interfaces is required in order to have the multiline capability. The 65C02 CPU and 8K ram buffer are the big reason the BBS is so fast because the ST doesn't have to do all the work.

[Nite Lite Systems, PO Box R, Billerica, MA 01821. Nite Lite Multiline BBS software, \$100. SP408 Programmable Interface, \$199. SP808 Programmable Interface, \$349.]

ARMUDIC & WAACE ST BBS'

Just a quick note for those that may not have heard about the new phone numbers for the ARMUDIC BBS (formerly the two BBS' mentioned above). The new number is 573-9207 (still area code 703 for those outside the metro dialing area).



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WordUp

The First Second-Generation Word Processor for the ST

Review by Milt Creighton

Many of us expected this word processor years ago. What makes it different? It simply does something no other word processor can do on Atari ST machines at present: *WordUp* provides multiple on-screen fonts in varying point sizes (each with a variety of type-styles) and, in addition, permits the integration of text and graphics in a single document. True, *Microsoft Write* provides multiple fonts but has no graphic integration capability and while *1ST Word Plus* allows one to insert graphics, it has no multiple font capability. The closest you can come to *WordUp* from Neocrypt are desktop publishing programs such as *Publishing Partner* or *Publisher* and both of them lack true text editing capabilities. *WordUp* fills a unique market niche, but just how well does it accomplish its objectives?

The program comes on three disks: a program disk and two system disks. The program disk contains most of the *WordUp*-specific files while the system disks invoke GDOS. One of the system disks is for those of us wallowing in the misery of owning only a single-sided drive(s) while the other is for the fat cats with a double-sided drive(s). There is also an "assign.sys" file provided for those with hard disks. The primary difference between the disks is that the double-sided version contains extended character sets.

Setting up the program is no more difficult than setting up most other GDOS-based programs. Those of you who have done it before should have no problem, and those of you who have not should be able to get through it without too much difficulty as long as you use one of the pre-set versions provided on the disk. Just follow the installation instructions

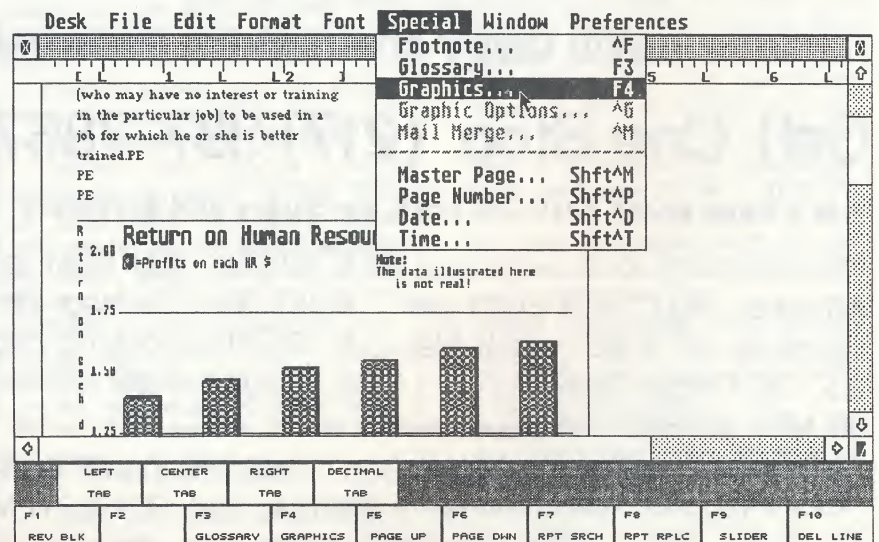
carefully.

I might add at this point that this program was designed to work with *Fontz!*, the font-converter also from Neocrypt. *Fontz!* permits you to convert Macintosh, Amiga, and even Degas fonts to GEM for use with *WordUp* in nearly any point size you want. The ads are somewhat misleading, however—especially the part about not having any problems! If you dare to climb down into the pit with the dreaded GDOS-monster, you had better be a seasoned warrior. Neophytes to the computer-world would be well-advised not to tamper with their fonts or their assign.sys files until they have earned their spurs.

Now that I have identified all the jazzy features and posted the appropriate warning notices, it is time to confront the program itself. Just how well does *WordUp* do what it is advertised to do? The answer is that *WordUp* has both good and bad points: I found the design concepts to be superior while the implementation fell below expectations.

For example, the cursor movement features are superb. One can move word-by-word, move to the beginning or end of a line, move to the top or bottom of a screen, or go to a specific page. Placement of the cursor with the mouse is the best I've seen outside of *Microsoft Write*. Unfortunately, the screen update speed is slow and the scrolling is clumsy. Most of these particular problems are not the fault of Neocrypt but come about because the screen has to be handled as a user-defined graphics image. It is still irritating, however, to watch helplessly while the backspace key eats half the sentence I so carefully crafted. Also, the slider bar operates fitfully unless you have turned on the option to have it behave properly, in which case the whole program moves at the speed of molasses.

I found that a number of my desk accessories interfered with *WordUp*, causing the program to crash. In addition, if I got too far ahead of the type-ahead buffer with scrolling and cursor move-



ment commands, *WordUp* would sometimes crash. Later versions will undoubtedly correct this. In fact, there is already a new version out that corrects one bug which did not permit using more than one graphic image per page. As an aside, Neoept has an interesting technical support policy. You get 60 days of free support over the telephone (a non toll-free telephone number is given in the manual) after which you have to pay a fee of \$25 to get another year of support. Neoept will, however, answer written requests for help from registered owners without requiring a fee. It's not a bad arrangement.

WordUp uses paragraph markers to separate paragraphs and a separate carriage return to separate individual lines of text (in an address, for example). Since you can set the amount of white space between paragraphs and the line spacing can be set separately, you have to make sure you use the correct command. Non-printing markers are placed on the screen where these commands are used. The resulting flexibility has all sorts of ramifications.

WordUp has left justify, full justify, and center commands but no flush right command. The block commands are slow but complete. The formatting for justification and margins is the best I've seen on any word processor to date. The drop-down menus all have keyboard equivalents. It does have a rudimentary on-line help feature, but no spelling checker or thesaurus.

WordUp has basic, but functional, mail merge features. Its search capabilities are very powerful. Its footnoting is manual rather than automatic (no renumbering). It has a macro feature that employs a glossary technique, similar to *Microsoft Write*, (powerful but not my favorite). *WordUp* makes use of master pages for headers, footers, and page numbers—a very nice feature with lots of flexibility. It does not, however, give the program a true double-column capability as the manual claims. You can import and export ASCII files and the file menu has some unusual commands to permit formatting of a disk or checking disk space. Another nice feature.

As advertised, you can import DEGAS high-resolution, Neochrome, or GEM Image files into *WordUp*, insert them in the middle of you text, and then watch the text flow around the image. There are some limitations, however. Since *WordUp* was written to emphasize its text handling features, placing the image is not as easy as in a desktop publishing program. It is possible to crop the image and scale it, but the "move" command was removed some time before release through it is still referred to in the manual. The "read.me" file on the disk says that it was found that using the block commands was easier than using the "move" command and the command was removed to eliminate redundancy. I suspect the truth of the matter may be that the "move" command did not work properly because I cannot imagine how it could have been more clumsy than using the block

commands. I also found that the graphics are touchy and can cause *WordUp* to crash. In addition, on one occasion, resizing of the image caused a number of characters from the international character set to be sprinkled throughout my text. That is definitely not one of my favorite features.

The Bottom Line: Is *WordUp* worth its \$80 price tag? Overall, I would have to say that it is, in spite of its lack of a spelling checker or a thesaurus. It isn't as powerful as *WordPerfect* or *WordWriter ST*, but it will do things they won't. It doesn't appear to be as bug-free as *Microsoft Write*, but it has additional capabilities and isn't nearly as expensive (and you do get an FX-80 GDOS driver). It doesn't have the page layout capability of *Publisher*, but it has substantially better text-editing features. As I said earlier, it fills a niche. It is the first of the second-generation word processors to come and, like all new advances, it broadens the horizon by redefining what we will come to expect in the future.



BEFORE "I used to feel like a dummy. But with The Atari ST Book, I can do all sorts of nifty things, like embed printer codes in text, or use a word processor to alter my DESKTOP.INF file."

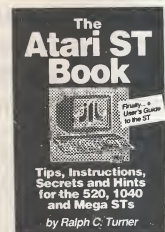


AFTER

In the past, many of the ST's features and capabilities hadn't been adequately explained in language that the average user could understand. But now *The Atari ST Book of Tips, Instructions, Secrets and Hints for the 520, 1040 and Mega STs* provides step-by-step instructions that help both beginning and experienced users get the most out of their STs. And no knowledge of programming is required!

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The Atari ST Book, by Ralph C. Turner. \$16.95 in check or money order from a U.S. bank. (Includes shipping and handling to North America. Europe add \$4.00 for air mail.) Index Legalis Publishing Co., P.O. Box 1822-9, Fairfield, IA 52556. © Copyright 1988 by Ralph C. Turner



CYBER CONTROL

The CAD-3D Motion Control Language

Review by Bill Moes

Soon after the ST, two names joined: CAD-3D ... Tom Hudson. The first excited. The second guaranteed quality.

Later, a major update/revision, *Cyber Studio* (CN Sept. 1987), was released which included the capability of creating sophisticated animations with *CAD-3D 2.0* and editing those animations with a new language, *Cybermate*. And then *Cyber Paint* (CN Ap. 1988) threw open the box, allowing the fireworks from various animation forms in a single film. Today, with the additional support disks available, ST users have a powerful combination of graphics and animation not available anywhere else.

Yet with *Cyber Studio* it's still a tedious task to actually create much in the way of an animation. Creating an animation can easily take hours. Hours of carefully moving or turning an object and then saving the screen. And then moving or turning an object and then Frame by frame by frame by 'Tis a problem.

Cyber Control is the solution. Written by Tom Hudson, it not only can be used to tackle the tedious, but can be used to create animations not at all possible otherwise. If you're seriously interested in developing animations with the *Cyber Studio* package, take a look at this one.

Cyber Control, which installs as a desk accessory, is used as a BASIC-like programming language. Its programming commands include the familiar: FOR/NEXT, IF/THEN, GOTO, GOSUB/RETURN. When it's clicked on, you'll have a clear text window over nearly all of the screen and you'll enter the language commands to develop the program. There are no line numbers; you'll use labels for program segments. *Cyber Control* includes specific reserved commands for: movement of the cameras (16 commands); object

manipulation (33); lighting (4); spline and hierarchy (8); animation recording (7); and miscellaneous (15). Including the additional programming commands, more than 100 commands are available.

As you write the program, using up to 128 variables, you're telling *CAD-3D* exactly what you want done for each frame. After you've written the program creating your *CAD-3D* animation and SAVED it, click on RUN, located on the upper *Cyber Control* menu bar. The syntax of your file will be checked; the check will stop at a mistake. When the syntax is correct, the program will run and the animation will be created.

It is not possible for *Cyber Control*'s syntax check to point out errors you might make within an animation, such as moving objects outside the *CAD-3D* universe. If an error shows up during the run, the program will stop and you'll be dumped back on *Cyber Control*'s editing screen. One of the 45 possible error messages will be displayed and the cursor will mark the offending line.

As a programming language, *Cyber Control* has very good flexibility. Much that is possible in *CAD-3D*, such as loading templates for spin or extrude, a partial spin, object movement, scaling or rotation, creating primitives, light manipulation, (the list goes on) will all be possible from *Cyber Control*.

But these possibilities from *CAD-3D* we already know. What about the unknown? Step into *Cyber Control*.

Cyber Control offers additional animation commands to help you develop sophisticated shows. Some of these are easily understood. Others are not.

Spline. A spline is a smooth curve defined by naming points along that curve. There are three

types of splines possible: linear (straight point to point), B-spline (a gentle curve in the space between the named points), and S-spline (an exaggerated curve to go through the points). After the splines have been defined, they can be used to move objects, cameras, or lights during your animations.

Cameras. Three cameras are available. One is the normal *CAD-3D* camera, fixed in space. The second camera can be placed anywhere in the *CAD-3D* universe (x, y, and z axes) and then pointed anywhere else. You can also name the camera #2 bank angle. The third camera is similar to camera #2 and can be placed anywhere in the universe. It differs from camera #2 in that, in addition to placing the camera anywhere, you specify the camera's heading, pitch, and bank angles. Camera #3 could, therefore, be used to simulate aircraft flight. This third camera also allows you to set the focus, or how far objects appear from the screen when you're using stereo separation. If you're not creating stereo views, the focus adjustment will have no effect.

Hierarchical Tree. Take a look at your hand. Flex the fingers. Move your wrist. Notice how they're all tied together by joints? (Sounds like a 3rd grade science class.) Anyway. With a hierarchical tree you can create animated objects that seem to be hinged together, such as a flexing hand or a walking body.

Creating a hierarchical tree is an involved process. The steps include: (a.) naming the objects you want shown; (b.) limiting the movement so that objects don't bend the wrong way (optional); (c.) putting the parts together by telling how they relate to each other; (d.) stating the order of rotation (optional); (e.) positioning the joints to be changed or moved; and (f.) moving the objects. Yes, it's just as complicated as it sounds.

Vertices and Faces. *CAD-3D* shapes are all made of triangular faces. This feature can be used to good advantage if you're interested in creating objects on a detailed basis. After you've determined what your object should look like, you'll give each vertex a number and list the coordinates in the *CAD-3D* universe. Then, each face is defined by listing the vertices it uses, noting whether the face's edge line is to be shown, and stating the face's color as taken from the *CAD-3D* color palette. It's quite possible, using these tools, to create some very unusual objects. It requires typing many numbers, but it's really not a very difficult process.

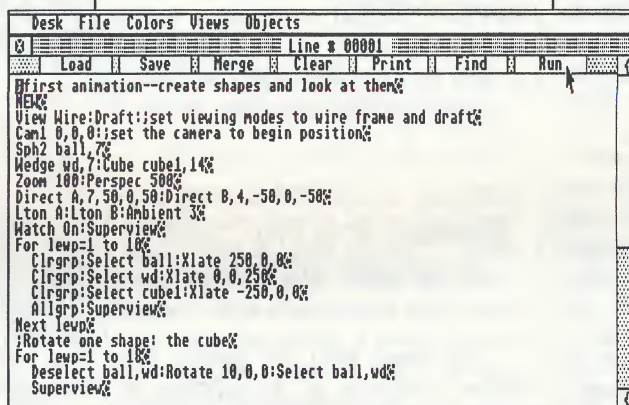
Stand Alone. Most will use *Cyber Control* within *CAD-3D*. However, it's also possible to use it by itself, outside of *CAD-3D*. With the varied and flexible language commands, you can load a Degas or Neo background and then bring in additional image/cel shapes (Degas Elite's Block format) to be moved over the background. As with normal *CAD-3D* animations, these cel animations can be recorded. This feature doesn't rival full-fledged animation programs, but it's easily done. The backgrounds and cel images also can be used in standard *CAD-3D* animations.

Editing. *Cyber Control's* text manipulation capabilities seem sufficient for a modest editor in a programming language. You can do the usual load/save or merge. There's a search for strings, not case sensitive. Keys move you to the start/end of a line and up or down a page. You can mark text blocks to cut and paste. Text files can be printed. Lines can have up to 75 characters.

Documentation. The 176 pages, which fit into your binder from *Cyber Studio*, explain the software quite well. Well-illustrated tutorials and demos guide you through the program's capabilities and the reference section explains the commands available. An appen-

dix by Hudson offers additional ideas and takes a stab at explaining hierarchical object trees. Another appendix by Darrel Anderson offers tips on advanced object creation.

Both Hudson and Anderson include *Cyber Control* files you can use to create objects. Because the language allows INPUT statements, these object-creation files give you the chance to see how the pros develop programs and to then use their programs to create objects of your own. Hudson offers a file to create *CAD-3D* objects based on math functions and one to make coil springs. Anderson includes a file to create spline models and another one to extrude objects that follow the curved path of a spline.



Other Notes. It should be obvious by now that *Cyber Control* is for the hard-core *CAD-3D* animators. If you're not sure about it all, you may want to take a look at an early, and very limited, version released in the public domain (CN ST Library disk 152). The PD version may offer a hint, but the real power of *Cyber Control* is understood only after use.

And again, let it be clear: this is a programming language. If you've done any work with BASIC, you'll recognize many familiar commands. Even programmers of other languages will be somewhat comfortable. Non-programmers, though, may have a tougher time. The documentation is not a programming primer.

Parts of *Cyber Control* are relatively easy to understand and use. For example, using it as a stand-

alone cel animator is straight-forward. And the development and animation of standard *CAD-3D* objects is not difficult. *Cyber Control* definitely relieves the tedium of long hours spent watching final versions of *Superview* line on endlessly.

Using splines, though, may be a bit of a challenge for some. And manipulating the hierarchical object tree is best left to the forest rangers.

It's very easy to make changes in the *Cyber Control* file. The wire-frame mode, quickly drawn, is useful in previewing your animations. Then, after all is set, you can change from wireframe to solid mode, add the Record commands, and record your animation.

Although not absolutely necessary, you'll find it extremely helpful to have version 2.02 of *CAD-3D*. This later version allows you to use all of the *Cyber Control* commands and permits up to 80 objects in *CAD-3D* memory. If you purchase *Cyber Control*, you can send in the warranty card with the original *CAD-3D 2.0* disk and get the *CAD-3D 2.02* upgrade free. Otherwise, it's \$5.00. An updated version of the animation editing language, *Cybermate*, requires \$5.00. *Cyber Control*, not copy protected, will work with one SS drive, although two drives are highly recommended.

Summary. *Cyber Control* (\$59.95) greatly eases the task of recording *CAD-3D* animations. In addition to the standard *CAD-3D* object creation and manipulation steps, it introduces several new and exciting possibilities for your animations: three cameras to dynamically spy on the scene, spline paths for cameras, lights, and objects to follow during a film, and the hierarchical connection for object sets. It's not all easy, but it's all possible with this sophisticated and flexible software.

[The Catalog, Antic Publishing, 544 Second St., San Francisco, CA 94107 (415)957-0886]

IMPOSSIBLE MISSION II

Evil Elvin Strikes Back

By Dan Greenblatt

Good morning, Field Agent Bravo 29. Your mission, should you choose to accept it, is to neutralize Professor Elvin Atombender again. This time he has constructed a computer that will break the launch codes to our nuclear missiles in eight hours. You must break into his West L.A. tower complex and destroy the computer.

Sounds easy, right? I mean, this is the 25th century, and you're only a veteran of Operation Cobra Blue, created just in case Atombender did this sort of thing again. Well, obviously it isn't easy, as this is called Impossible Mission II. (The first Impossible Mission was never made for either Atari line.) Why so impossible? Because good old psychotic Elvin has eight towers surrounding the one with the code-cracking computer, all of which are fraught with danger. Danger, in this case, means a collection of robots guarding every room and its contents with a passion. There are electrified sentry robots that are equipped with lasers that will turn the unsuspecting agent into grilled cheese. Bashbots will push intruders off ledges into space or crush them against walls. Suicidebots do the same thing, only they will die with the intruder as it pushes him over the ledge. And Minebots leave deadly mines that explode when a human steps on them.

The layout of each room is simple. Besides robots, each room contains ledges, elevators, floors that can shift from one side to the other, computer terminals, and various objects. In order to progress from one tower to another, the objects must be searched for a portion of a three-digit passcode that will open the security doors to the adjacent towers. Objects can also yield security commands,

extra time, or nothing at all. Objects can only be searched once, and many passcodes you find will not work, as there are some 9-20 of them scattered throughout each tower. In addition, each number can only go in one place in the code, as indicated by its color. Colors are not interchangeable. (For example, if the code is green 6, red 8, blue 4, and you have green 4, red 6, blue 8, then your computer will not register success.)

...Any arcade master will love this game, as the action is almost always intense. It is also quite intensely difficult...

The best way to defeat the robots' purpose is to dodge or jump over them. However, other ways exist. Elvin built a security system into his towers, and this can be used against him. This is where the security commands come in. There are six commands. The lift-reset command will set the lift-platforms in the room at their original positions as defined when you walked in. The platform command moves adjustable floor segments across the room, making some objects more accessible and dumping robots all over the place. The unplugged robot symbol disables every robot in the room for a period of time. The mine symbol arms a player's mine that will explode when any robot (or the agent) steps on it. And the light symbol turns on the lights in any dark rooms in the tower.

There is only one way to lose--if the 8 hours runs out before you deactivate the central

computer. This may seem to be easy to avoid. Believe me, it isn't. Every time you are zapped or crushed or otherwise killed, five minutes is deducted from your 8 hours. This may not appear to be much, but if you die six times trying to negotiate one room, that's a half-hour down the tubes!

Your clock is constantly running, too, so time can become a real problem in the later stages of the game. On top of all that, you only get 30 minutes of real-time in each tower, so you can't wait around and play cautiously for too long.

In any case, passcodes are not the only thing you need to defeat Elvin in under eight hours. You also need music. In each tower, one room contains a safe. This safe has a musical sequence in it. To open the same, the time bomb security command must be used, the bomb must be dropped, and the agent must be away from the explosion that results. The safe must still be searched for the music. There are six musical sequences in all, along with two duplicates. To enter the central tower, all six musical sequences must be played off your tape recorder. This device is built into your pocket computer, which also helps you assemble the passcodes connecting the towers. Once the six pieces are played, you can enter the express elevator to the central tower.

This is the final phase. In this ordinary-looking penthouse room, there are three terminals side by side in the center. Access the right one, the codes are disarmed and the world is saved. Access the wrong one, and you feel the awesome power of a 2200 volt electric shock.

Simple, right? That's why they call it impossible. And believe me,

PRESCHOOL KIDPROGS

Entertainment For The Young ST User

Review by Roger Abram

A feeling of impending doom always comes over me when buying software for my kids. Let's face it, the likes and dislikes of children are not only unpredictable, but change on a daily basis. Spending \$20 to \$40 on a program for them is like begging for trouble.

Take my four year old, for example. For weeks on end all she has wanted for lunch was a grilled cheese sandwich. Then last week she came to the conclusion she hated them. Now she's on a cheese hot dog kick. Who knows how long that will last?

I do, however, have temporary judgement lapses and try my best to select a program that will either entertain my kids or teach them something. Whatever I decide to purchase, it has to be priced at a level that won't send shockwaves through the Abram household should it either bomb out or not have staying power.

Preschool KidProgs, by Mich-Tron, comes close to meeting my requirements. It's main drawback is its price—it lists for \$39.95.

Programmed in GFA Basic by D.A. Brumleve, *Preschool KidProgs*

is actually a collection of three bright and colorful programs designed to stimulate the development of young children. The programs are completely mouse based and after some initial guidance, I did find that my four and six year olds could be pretty much left alone with the game.

Of the three modules, Kidkeys is their favorite. The main screen for this program has a keyboard on it which you can select to be either a piano or organ. You can then click on the keys and make your own music or you can pick a tune to play from the program's library. In all, there are twenty familiar tunes that my kids love to sing along with. There are such notables as "I'm A Little Tea Pot," "Mary Had A Little Lamb," "Three Blind Mice," and "The Itsy-Bitsy Spider." For moms and dads who may have forgotten a word or two, at least one verse of each song is printed in the manual.

The second module, Kidblocks, is an onscreen, multi-sided block puzzle featuring six different pictures. Initially, the blocks are all scrambled and the

child has to click on each block until the desired side is displayed. When a picture is successfully arranged, music sometimes plays or the picture becomes animated.

The last module, Kidgrid+, is a limited drawing program consisting of 192 triangles which can be filled with color to create your own pictures and designs. The twelve different colors appear in rectangles on the left side of the screen and the youngster only has to click on the appropriate box to select the color. The mouse is then moved to a triangle and clicked again. The triangle changes to the new color.

My children thoroughly enjoy *Preschool KidProgs* and I would recommend it to all young kids and their parents, if not for its price. A better buy would be Current Notes disk #211 which contains programs for youngsters, including my four year old's current favorite -- KidPotato, also programmed by D.A. Brumleve.

[MichTron, 576 South Telegraph, Pontiac, Michigan, 48053 (313) 334-5700. Color monitor only.]

Impossible Mission II

you will probably flounder for at least a week before figuring out all the little details of the game, and how to access everything. Average playing time is about 45 minutes. There is, fortunately, a save game feature allowing the player to quit and come back later after his/her nerves are reassembled. This game is very addictive.

One complaint I had was the documentation, or lack thereof. More specifically, the docs are very vague in places. For example, I first thought after reading, "Tie together the musical sequences

into a full melody," that I should go back and shift the music around until I created a song. So I went back to the safe where I thought was the beginning of the song, and found I could not search again. I realized then that all I needed was the six pieces, in any order. I died trying to get out, and after escaping from the room I had only three seconds to reach the express elevator. Naturally, I didn't make it.

Another gripe I had was an odd quirk in the sound. On my 520, it was fine. But when I hooked up my 1040, it acquired a whine and was muted drastically.

But perhaps this is just my computer.

And perhaps I also took the instructions too literally. Oh well. This game is too good to pass up. Any arcade master will love this game, as the action is almost always intense. It is also quite intensely difficult, and mastering it can be seen as a challenge. Buy Impossible Mission II and relish it. Now, if you'll excuse me, I have a world to save.

[Epyx, P.O. Box 8020, 600 Galveston Drive, Redwood City, CA 94063. Joystick and color monitor required.]

PHANTASIE III

You Can Nick A Disc, But You Can't Nikademus

Reviewed by Robert Millard

The current *Dungeonmaster* craze has cast other recent fantasy releases in a wan light. FTL's compelling offering may prove to be "the" ST game, period, if a success formula of reputation times sales is applied. So *Phantasie III's* promise of a do-or-die confrontation with the nefarious Nikademus might not elicit a battle roar from Atari gamers. Besides, although the original's ST conversion was the first CRPG to exploit sixteen-bit graphics potential, *Phantasie II* seemed no more than a new plot in the same game system. But *Phantasie III - The Wrath of Nikademus* is so graphically superior to its lineage, and makes such intelligent use of the ST machine, that *Dungeonmaster* notwithstanding, it deserves attention.

The title screen boots up, accompanied by the usual forgettable music (thankfully confined to the opening sequence), and credits designer Doug Wood as well as Westwood, the company handling the ST conversion. Westwood also handled *Roadwar 2000* and its busy, blurry graphics of North America. But they have obviously learned a lot about art on the ST since then. These graphics have a luster, depth, and clarity that trumps LDW's efforts on the previous *Phantasies*. (This writer's review of *Phantasie I* can be found in the May 1987 issue of *Current Notes*. Most of the game system descriptions therein apply to the latest release as well.) The major criticism of fantasy games these days is an overemphasis on graphics, but if *The Bard's Tale's* myriad monster pictures made that game a hit, *Phantasie III's* arsenal of artfully-rendered adversaries should earn it a fair share of sales.

Phantasie III's game interface has been improved as well. Dialog boxes and statistical screens offer a more fluid maintenance of party members when in towns. Items can now be traded between characters without a complete party disbursement, though the system still has some flaws. The surface world map of Scandor, viewed through a smallish window, scrolls with no disk access. (Waiting for a new map screen to load in the previous *Phantasies* induced Sierra *deja vu* in some gamers.) Best of all, each dungeon can be saved separately. Previously, only one save was possible, so each dungeon had to be completely accomplished before proceeding to the next one. Disk access on the whole has been minimized,

reflecting the same ease of play Westwood achieved with the *Roadwar* games.

Doug Wood's rather rigid game design seems to discourage radical changes, but the few new features are good ones. Each time a character advances a level, it can train in three of nine possible areas that include four thieving skills, three fighting skills, listening for monsters, and swimming. If a character can attack but not parry, or disarm a trap but not pick a lock, it was the gamer's choice that made it so. Injuries are more complex, too. The right half of the game screen shows each party member's name, magic points, hit points, and a human form with outstretched appendages that graphs each character's injuries. A range of colors on each body part indicate the degree of injury. Reality factors determine options. Serious injury or loss of a right arm will prevent spell-casting or weapon-wielding. Leg injuries will render a character down on the ground. In turn, the party members have a new combat option, aiming a blow at a critical body part, much like a hunter in *The Bard's Tale*. And it can be accomplished with a long overdue addition to the game's weaponry: the bow.

For those unfamiliar with the game, *Phantasie* involves fighting many different monsters, mostly in dungeons that are simple overhead mazes. A battle switches to full screen, black background, with excellent party and monster pictures, limited animation, and no tactical movement. (The new feature of party rank movement is largely abstract and not a major factor.) Towns are single screen and serve primarily for statistical maintenance. The surface world offers little exploration and discovery. The game's important events occur in the dungeons. Though dungeon graphics are only simple lines and dots, the layout is usually clever, and the little puzzles and plot incidents therein are the game's main appeal beyond combat and character development.

Lately, discussion of CRPG plots is a can of wyrms that, in this review, will be opened for only a brief instant. A consensus of opinion on GENIE indicates that *Phantasie III* is briefer and perhaps easier than the first two installments. There are still scrolls to find, special items to use, abstract characters like Filmon and Lord Wood, netherworlds and planes, and puzzles. But the dungeon designs seem

less inspired; some are quite small and can be fully explored in a few minutes. If some fantasy games feel like War and Peace, *Phantasie III* seems somewhat of a fast read.

Yes, *Phantasie III* is like I and II and so many other CRPG efforts: hack and slash, thrust and parry, and then some. And then some more. But it is the kind of polished, classy effort that Atari owners have historically accorded recognition. And it is the final chapter of the struggle against Nikademus. Yet, an incidental effect of the Dungeonmaster's omniscient spell may cast the game into a sopor. Indeed, it may become a sleeper.

Misty Writings--In my review of *Ultima IV*, I failed to mention an important feature that was added to the ST version: dungeon saves are possible! This is especially helpful in the abyss, and just before entering the codex. Evidently, few gamers are aware of the small text adventure in *Roadwar 2000*. If you defeat an invader death squad in tactical combat near Miami, there is a random (50 or 100 to one) chance of getting a plane, which will fly you to Nassau. That's where the text adventure is ... If anybody needs help with any of the CRPGs I've reviewed in the past year, they can reach me on GENIE.

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JUGGLER and JUGGLER II

The Con Artist

By Donald C. Lyles

A review of *Juggler* and *Juggler II* is actually a review of three different programs. The first is the original version of *Juggler*; the second, a review of *Juggler II*; and the third, a look at the revised version of *Juggler*. Last month, encouraged by my editor, I took on the assignment of trying to master *Juggler* (version 1.0). Fine, no problem. I could certainly juggle my schedule to write the review. But then minor difficulties arose.

Juggler did not really "juggle" the way it was supposed to. As a matter of fact, in more than one way it bungled. Michtron had a good idea for a program: a utility to allow two or more applications to remain resident in ram concurrently while the user switches back and forth between them. While not a true multi-tasking environment, given the basic premise and assuming it would work as advertised, it could have, should have, satisfied those of us looking for multi-tasking on the ST.

Being an astute (and informed) software user, I turned to the instruction manual first. It seemed fairly straightforward, directing me to run the program by clicking on the file "juggler.app".

First problem. There was no file called "juggler.app". Dutifully, I made note of the disparity and clicked on "juggler.prg" instead. True to the instructions, a dialogue box appeared asking which programs I wanted to load. Now, according to Michtron, *Juggler* runs GEM-based programs. Among those purported to work are *Thunder*, *DB Master One*, *First Word* and *Michtron BBS 2.0*. Being a trusting soul, I tried loading *DB Master One* and *First Word*. The results were not good. *First Word* worked only if it was loaded first. *DB Master One* did not work at all with *First Word* loaded. The

two programs simply would not juggle back and forth.

After a couple of phone calls to Michtron and the promise of a revision being mailed to me as soon as possible, I tried again. This time I loaded *First Word* and *Thunder*, two programs which would be nice to be able to access concurrently. Low and behold, success! But this disturbed me. Why was this combination successful, while others also touted as "compatible" were anything but?

After the arrival of *Juggler* and *Juggler II*, the revision, it was back to the keyboard for testing. *Juggler II*, which is referred to in the manual as a "quick starting" program, resembles *K-Switch*. *Juggler II* allows you to divide your ST memory into eight partitions (of course, the more memory the better). Each partition acts like its own individual computer, completely independent of the others. You switch back and forth between the partitions by either using a desk accessory function and clicking on the partition you wish to activate or by "stepping" through each of the partitions in rank order by depressing the shift and alternate keys simultaneously.

Michtron says they created *Juggler II* for programs that do not follow the protocol set up by Atari as well as for programs that are not GEM-based. The result? It works! As a matter of fact, as I write this article, I am using four partitions on my (1 Mb) 520ST. The program does allow for switching between GEM and non-GEM based programs. It is effective and appears to be safe (at least I have not run into any problems yet.)

The revised version of *Juggler* does not appear to hold any new surprises. As a matter of fact, it

has the same number of bytes in the program and still carries the version number 1.0. It still works with some GEM-based programs and lets you switch from active to background programs using the mouse (essentially, what you are doing is moving from screen to screen). The only difference between the revised *Juggler* and *Juggler II* appears to be that *Juggler* is strictly for use on GEM-based programs.

You can not switch programs while your computer is doing any active I/O work, such as reading or writing to the disk or printing. Other than that restriction, I have encountered no problems using *Juggler*. Note that you are provided an option of saving the programs you want available as switchable applications. When you run *Juggler*, the selected applications are all loaded automatically.

Juggler and *Juggler II* can be used concurrently. For example, divide your computer into two partitions using *Juggler II*. Have the first partition operate a non-GEM-based game and then step (using the Shift and Alternate keys) to the second partition. Use *Juggler* in the second partition to juggle two GEM-based programs.

Using *Juggler* can be a little cumbersome at times. *Juggler* and *Juggler II* will not work with a ram disk, *Publishing Partner*, nor with any type of cache program or *Deskart*. I recommend that once you find those programs that you would like to be able to switch among, be sure to save them using the SAVE option in *Juggler*. It's not multi-tasking, but it is an alternative that, one way or the other, will work.

[*Juggler I & II* by Michtron, 576 S. Telegraph, Pontiac, Michigan, 48053 (313) 334-5700. \$39.95.]

FLAG

This one is a bit longer than usual, but after viewing those red and white stripes, followed by the blue rectangle covered with stars, you will appreciate the extra effort you made.

```

10 REM Draw the United States Flag
20 REM High Resolution 4-Color Graphics,
25 REM No Text Window
30 GRAPHICS 7+16
40 REM Setcolor 0 Corresponds To Color 1
50 SETCOLOR 0,4,4:RED=1
60 REM Setcolor 1 Corresponds To Color 2
70 SETCOLOR 1,0,14:WHITE=2
80 REM Setcolor 2 Corresponds To Color 3
90 BLUE=3:REM Defaults to Blue
100 REM Draw 13 Red & White Stripes
110 C=RED
120 FOR I=0 TO 12
130 COLOR C
140 REM Each Stripe has 6 Horizontal Lines
150 FOR J=0 TO 6
160 PLOT 0,I*7+J
170 DRAWTO 159,I*7+J
180 NEXT J
200 C=C+1:IF C>WHITE THEN C=RED
210 NEXT I
300 REM Draw Blue Rectangle
310 COLOR BLUE
320 FOR I=0 TO 48
330 PLOT 0,I
340 DRAWTO 79,I
350 NEXT I
360 REM Draw 9 Rows of White Stars
370 COLOR WHITE
380 K=0:REM Start with row of 6 stars
390 FOR I=0 TO 8
395 Y=4+I*5
400 FOR J=0 TO 4:REM 5 STARS IN A ROW
410 X=K+5+J*14:GOSUB 1000
420 NEXT J
430 IF K<>0 THEN K=0:GOTO 470
440 REM Add 6th Star Every Other Line
450 X=5+5*14:GOSUB 1000
460 K=7
470 NEXT I
500 REM If Key Hit, then STOP
510 IF PEEK(764)=255 THEN 510
515 REM Open text window w/o clearing screen
520 GRAPHICS 7+32
525 REM Change colors back
530 SETCOLOR 0,4,4:SETCOLOR 1,0,14
1000 REM Draw 1 Star Centered at X,Y
1010 PLOT X-1,Y:DRAWTO X+1,Y
1020 PLOT X,Y-1:PLOT X,Y+1
1030 RETURN

```

GTIA TEST

Running counterclockwise, a peach, pink, blue oval gradually is formed until it becomes a solid. Later little, black lines one-by-one disappear.

```

100 REM GTIA TEST
110 DIM C(22,2)
115 GRAPHICS 10:FOR Z=704 TO 712:READ R:POKE
Z,R:NEXT Z
116 DATA 0,26,42,58,74,90,106,122,138,154
118 LIM=22:T2=3.14159*2/LIM
120 GOSUB 2500:FOR V=1 TO LIM:T=T+T2:GOSUB
2500:NEXT V
200 GOTO 1000
400 FOR X=1 TO 8:Z=PEEK(704+X):Z=Z+16:IF Z>255 THEN
Z=26
420 POKE 704+X,Z:NEXT X:POKE 77,0:GOTO 400
1000 REM
1010 FOR R=1 TO 8:T6=R
1020 GOSUB 1520:NEXT R
1110 FOR R=9 TO 15:T6=16-R
1120 GOSUB 1520:NEXT R
1210 FOR R=16 TO 23:T6=R-15
1220 GOSUB 1520:NEXT R
1310 FOR R=24 TO 30:T6=31-R
1320 GOSUB 1520:NEXT R
1400 IF T3=1 THEN GOTO 400
1410 T3=1:GOTO 1010
1520 COLOR T6:V=0:GOSUB 2000:PLOT X,Y:
FOR V=1 TO LIM:T=T+T2:GOSUB 2000:GOSUB
3000:DRAWTO X,Y:NEXT V:RETURN
2000 X=(30-R)*C(V,1)+40:Y=(60-R)*C(V,2
)+80:RETURN
2500 C(V,1)=SIN(T):C(V,2)=COS(T):RETURN
3000 IF T3=1 THEN IF (R=1 AND V>11) OR
R>1 THEN POSITION X,Y:POKE 765,T6:XIO 18,*6,0,0,"S."
3010 RETURN

```

GTIA DEM 2

At first squares are formed from the outside to the inside of the screen. Later squares become rectangles, going from vertical to horizontal shapes. The entire process continues ad infinitum.

```

1 REM GTIADEM2
10 GRAPHICS 11
20 FOR X=0 TO 78
30 C=C+1:COLOR C:IF C=127 THEN C=0
40 PLOT X,Y:DRAWTO 78-X,Y:DRAWTO 78-X,191-
Y:DRAWTO X,191-Y:DRAWTO X,Y
50 Y=Y+2:IF Y>191 THEN Y=0
60 NEXT X:GOTO 20

```


Welcome Back. I almost missed an issue from lack of messages, but I managed to get some unanswered questions together from previous issues. And, good news! A new board just went up called the Crusader's Castle, which will become a new source for Tips 'N' Traps. The new number is (703)360-1984, so give it a call for those of you with modems, along with Merlin's Litterbox at (703)250-7303. If you want to ask me something personally, call me (voice only) at (703)378-3540. See you next month.

DUNGEON MASTER

Q. I must have got on the bandwagon late, but I'm still on level 4 of DM. I think I have been everywhere, but the steps leading down to level 5 are blocked by an iron gate that seems immune to anything I can do. Any help would be appreciated. I do have the maps, so I think I have been everywhere. Thanks.

--Jeff Johnson

A. Still in the realm of the purple worms, eh? Well, this is what you gotta do (though you probably won't like it):

- Go back to the zombie suspended over the pit (next to the message THIS IS MY PRISONER. LET HIM SUFFER).
- Kill the zombie (with a throwing star, preferably, but a fireball spell will do the trick, too ... you just want to save your mana for what comes next).
- Be prepared to fight your way through about another half-dozen pairs of worms ... they're released when you kill the zombie.

--"Reforger"

Q. Once you have merged the Firestaff and Power Gem how do you kill Chaos? I have tried fluxcaging him but he just teleports out. Is there any key for the IR door?

--"Raven"

A. You have to surround him with cages and/or walls.

--"Reforger"

Q. I had him surrounded with fluxcages but they just wore off after a while. Do I have to do something else to him once I have him surrounded?

--"Raven"

A. You need to use the 'FUSE' power of the FireStaff on him once he is trapped by your fluxcage.

--Chris Leonhard

Q. When is a rock not a rock? When it isn't a stone, or floor, or wall, or anything for that matter.

--"Jack Flack"

A. Believe it or not, the answer to that is "when it is nothing". Makes sense right? Makes too much sense, actually.

Q. How do you get past the "test your strength" Blue Mist on level 6?

--"Raven"

Q. After you have the third Ra key, is it necessary to keep going or can you just turn around and go back up to level 7? I tried to keep going, but ran into two knights that I can't kill. Does anyone know an easy way to kill them?

--"Raven"

TRINITY

Q. I'm stuck way at the beginning. I have the paper bird that tells me to be at Long Water at 4:00, but I can't get there because of the "Do Not Walk On Grass" notice. The comic book that comes with the game shows me symbols that match those on the Sundial. What do I do before I get nuked at precisely 4:00 pm?

--Derrick Williams

A. Anyway, back to Trinity. I got pretty far in it since last I played (to the Kitchen or thereabouts) so I'll lend you a stick out of the quicksand. Examine everything. Look at everything that is mentioned in the text. Talk to people. While not useful point-wise, you'll get some valuable insight to the game and what's going on. Especially the woman who's feeding the birds. Try the format "ASK WOMAN ABOUT xxx". Ask her about everything. For fun, try TRINITY.

Imagine yourself actually there. If you're stuck, do something else and go back to it. A few hours away from the game or a good night's sleep will bring fresh insight later on. Of course, those are the rules as with any Infocom game or, for that matter, any adventure game.

Okay, a couple of keywords/phrases for you to think about: The sign says: "do not WALK on the grass, tree, soccer, perambulator." Oh, and don't forget to not leave empty-handed where the sundial is. Once you're passed this section of the game you can't go back. I had to restart the entire game.

--Sam Wright

SPACE QUEST

Q. How do you get past the door in front of that little volcano, and next to the pit with the green tentacles?

Also, where do you get the "fizzy" stuff to kill Orat?

---Jim Stevenson

BEYOND ZORK

Q. How do I get the alligator's jewel through?

---"Shaman"

Q. (1) How do you get out of the cellar in the pub? I got everything in it, but I can't get out. (2) How do you cross the bridge, or does the umbrella serve a purpose when it's broken? (3) Does anyone know the answer to the riddle on the cliff (My tines be long, etc.)

---"Max Quordlepleen"

POLICE QUEST

Q. How do you get the girl out of the hotel so you can play poker? Also, do you need the radio? And if so, how do I get it?

---"Raven"

LURKING HORROR

Q. What do you do with the brass hyrax? Do you put it on the hand?

---"Shaman"

Q. I found the tomb in the sub-basement of the Aero Building and opened the lock. Now, those stupid rats are in the tunnel. How do I get past them, or survive them?

---"Zor Prime"

Q. How do I enlarge the crack in the wall? What am I looking for in the cinder block tunnel, and how do I frighten the Urchin?

---Steve Steinberg

THE PAWN

Q. Can anyone "shed some light" on how (and where) to find what the Guru wants??

---Dave Lee

SPACE QUEST 11

Q. What do I do after I have gotten to Vohaul's asteroid? I have explored it fully, and am at an impasse.

---Anonymous

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BUG HUNT and BARNYARD PLASTER

Two Games for Atari's Light Gun

To date, Atari has released two cartridge titles employing its XE Game System light gun. *Bug Hunt*, a relatively straightforward shooting contest, was packaged with the game system; *Barnyard Blaster*, which is a good deal more sophisticated, sells separately (\$29.95 list). Both may be played either by one or two players.

A certain amount of fear (bordering on paranoia) of small creatures is evidenced in the storylines of both games. In *Bug Hunt* the human player is supposed to be a computer operator whose motherboard is attacked by flies, roaches, termites, ants, and spiders. To keep them from driving you (the player) crazy, you must shoot them with your light gun. *Barnyard Blaster* has you and your grandpa trying to save your farm from an infestation of vermin. Unfortunately, most of these so-called "vermin" are rabbits, ducks, chickens, birds, and owls, a definite indication that gramps and his offspring are not playing with anything remotely resembling a full deck.

Scoring in *Bug Hunt* is based on how difficult (because of size and/or movement) each insect is to hit. How many bonus points a player receives and whether he advances to the next wave is determined by the percentage of bugs hit per total shots fired. Because of this, it is not a good idea to fire wildly in the hope of eventually hitting your target. It also doesn't make sense to fire at those more-difficult-to-hit objects, such as moving caterpillars or tiny bugs, unless you are in one of the early waves where accuracy doesn't count for as much. In later rounds you should focus on the larger creatures--the frogs, butterflies, and a demon-like creature who materializes from a

small, gem-like bug. As you improve, of course, you should begin to take on the more challenging objects, as they bring with them a good deal more points than do their larger, slower brethren.

At the end of each wave, a status screen appears showing the wave number, the numbers of shots and hits, the accuracy percentage and bonus (if any), and the wave and total scores. When the game ends a final status screen appears and displays the player's score and gives one of eleven final ratings (e.g., "Hacker") based on the points earned.



Rank in *Barnyard Blaster* is determined by the number of screens completed. For example, for finishing from 33 to 36 screens, one earns the title of "Blaster", while the poor soul who finishes none is labelled a "Total Dud". To advance from one screen to the next, you must use the 40 bullets you are given wisely, achieving at least the minimal level of accuracy designated for each round. The quicker you shoot a moving target, the more points you gain for a hit. Each time you complete a screen, your screen score, bullet bonus (based on how many bullets are left), and total score are displayed.

Unlike the one-screen playing field of *Bug Hunt*, *Barnyard Blaster* provides its shooters with four

colorful, nicely drawn playing areas. In the Barnyard Screen, bottles and cans balanced on a fence provide suitable, static targets for the novice. Each may be hit directly, in which case they smash or are partly blown away, or they may be shot away intact if the player hits them from below. In the latter case the ping-like sound effect when the bullet makes contact is particularly effective.

The Cornfield Screen contains both static (melons and pumpkins) and moving (crows and rabbits) targets. The former must be shot before the animals may be dispatched. In the Barn Screen, however, there are only moving objects (birds, owls, mice, etc.). Naturally that makes this screen more difficult than the earlier two.

Whenever the player completes one of these three screens, Gramp's Bonus Screen appears. Gramps will throw ten bottles into the air, one at a time, and the player should shoot as many as possible for bonus points. Shooting Gramps (as much as he may deserve it) ends the bonus round immediately.

My children and I enjoyed playing both games, although we all felt that *Barnyard Blaster* was superior for a number of reasons. Although *Bug Hunt's* motherboard and insect targets were drawn sharply and realistically, and animation was lively, the absence of additional, unique screens was a drawback. *Barnyard Blaster's* quartet of cartoon-like playing fields, on the other hand, were appropriately cute, providing just enough variety to keep this game interesting long after *Bug Hunt* ceased to be a novelty.

By using only shades of metallic green and white in *Bug Hunt*, authors Rob Zdybel and Adam Murphy create an eye-

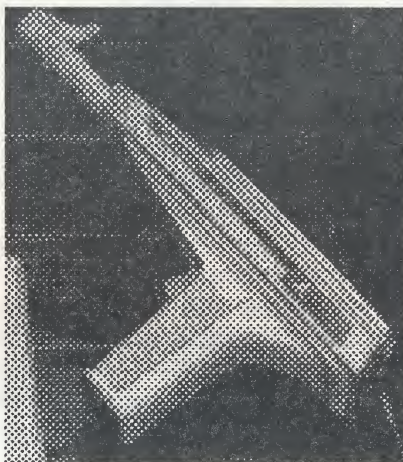
catching visual effect; however, after awhile, this too becomes tiresome, and one longs for the strong, varied hues found on James V. Zalewski's *Barnyard Blaster*.

Finally, there is much more variety to be found in *Barnyard Blaster*, not only in the number of screens but also in the types of targets.

Where *Bug Hunt* bested *Barnyard Blaster* were in its score-keeping system, by the types of creatures being shot at, and by the presence of the demon-like creature. While it is made clear in the former game what accuracy percentage is needed in order for the player to advance to the next wave, there is no mention of this in the latter contest. Secondly, while I take no issue with blasting insects (except for the butterflies), killing ducks, chickens, and bluebirds is not my notion of sport or self-defense. Finally, the presence of the "demon" in *Bug Hunt* adds an element of danger to the proceed-

ings. In all other cases in both games, what we are shooting are defenseless creatures. Only with the "demon" is there any sense of threat to the player.

The light gun does not work



perfectly in either game. I found that lining up both sights with the target was time-consuming and quite often no more effective than just shooting from the hip. In fact, once I got the feel of the weapon,

shooting Dirty Harry-style gave me a good deal more accuracy. A quirk specific to *Barnyard Blaster* is that it is often easier to hit smaller, more point-valuable targets than those larger, less valuable ones. This is particularly true in the Barn Screen where I rarely missed the tiny mice but wasted shot after shot trying to hit ducks, chickens, and the owl.

Although I enjoyed playing both games, and would recommend that XE Game System owners purchase *Barnyard Blaster* (and that 8-bit computer owners buy a gun/*Bug Hunt* package as well as *Barnyard Blaster*), I would like to see future titles provide more excitement by having targets not be defenseless, harmless animals. Perhaps with its soon-to-be-released Chicago gangster cartridge (tentatively entitled *The Unplugables*) Atari will succeed in creating a more challenging, exciting game than either *Bug Hunt* or *Barnyard Blaster*. Until then these two will do quite nicely.



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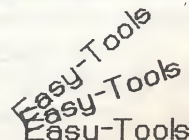
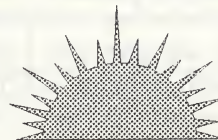
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US DOUBLER and RAMBO XL

Two Good Investments for the 8-bit Owner

Review by Al Willams

US DOUBLER

The **US Doubler** (the "US" stands for Ultra Speed) consists of two plug-in modules that, when installed in a 1050 disk drive, convert the 1050 into a true double-density, single-sided drive.

In most cases, installation consists of opening up the case of the disk drive, installing the ICs, and closing it up again. Since Atari has made two different types of 1050 drives, however, things could become a bit more complicated. The ICs given with the installation kit are of the type that is most commonly found, but if your 1050 takes the other type of IC, then you have four options.

First, you can send the IC back to ICD, and they'll replace it with the correct plug-in unit. Secondly, you can move two jumpers to make your 1050 drive conform to the IC that comes with the kit. Your third option would be to send the 1050 back to ICD along with \$15, and they'll convert it for you. The easiest and quickest way, however, is to have your dealer convert your drive for you. The cost is usually rather nominal.

For some reason, when Atari designed the 1050 drive, they used a drive mechanism that was capable of writing double-density, but the electronics that they used could only support an enhanced density mode. That is why a rather simple modification of the electronics is able to give you double-density.

The US Doubler will give you 180 kilobytes on each side of a disk, and with the use of SpartaDOS, a high speed transfer of data

to and from the drive. Even without SpartaDOS, you'll get an eight per cent increase in transfer speed, and additionally, the new electronics will position the read/write head more accurately.

For the modest price of the doubler, and the small amount of time and effort that it takes to install, the US Doubler is a worthwhile investment.

[ICD, Inc., 1220 Rock Street, Rockford, IL 61101, (815) 968-2229. List price is \$69.95 with SpartaDOS, or \$39.95 without SpartaDOS.]

RAMBO XL

While this is a review of the RAMBO XL modification for the Atari 800XL and the Atari 1200XL computers, you will generally need SpartaDOS for full support of the modification. The SpartaDOS Construction Set retails for \$39.95, and SpartaDOS X, which is a cartridge version of SpartaDOS retails for \$79.95, and is also made by ICD, Inc.

RAMBO XL converts your Atari 800XL or 1200XL into a 256K computer that, when used with SpartaDOS, supports a 192K RAMdisk and is completely compatible with 130XE programs and with Basic XE in the extended mode. It will also support Atari DOS 2.5 and its 64K RAMdisk.

The kit comes with a RAMBO XL piggyback board, a piece of fine hook-up wire, a piece of heat shrink tubing, and most importantly of all, the instruction manual. You supply the eight 256K DRAMS.

The manual gives you simple,

step-by-step directions for accessing the main circuit board of your computer. This should be done as soon as you get the kit since you should find out one important item. Does your computer have sockets, or are the IC's soldered directly to the board? If you have your chips soldered in, then ICD recommends that you send your computer to them to have them modify it for you. The charge for this will be \$30.00, which includes return shipment. Since you will have to unsolder nine, 16-pin chips, add a board, and bend up five pins on a 40-pin chip, unless you are a really skilled technician, it is recommended that you avail yourself of this option if your chips are soldered in. If you are not sure of doing the modification yourself, then you might consider letting ICD do it for you anyway.

Naturally, when I opened the case of my 800XL, I discovered that all of the chips that I would have to access were soldered to the main board. While I may not be too bright, I'm not exactly crazy either, so I sent the computer, the RAMBO XL board, and the DRAM chips to ICD to have them install it.

I received the modified 800XL within a week - ICD works fast!

The first thing that I tried was AtariWriter+; the program thought that I was using the 130XE. As a matter of fact, I'm using the 800XL, now complete with bank switching, the same as if I were working with the 130XE. Every program that I've tried so far thinks that the 800XL is a 130XE--complete compatibility!

As nice as it is to be able to use 130XE programs, the really

nice part of the modification is the large RAMdisk available to the user. I've been learning to use Kyan Pascal, and since it is a compiled language, it is disk intensive. As a result, I am always loading files to and from my computer. The sheer speed of the RAMdisk really shines here.

For example, using Atari DOS 2.5 to load the public domain game Space Lords took me about one minute. With SpartaDOS, it took 14seconds. Using the RAMdisk, the loading time was under two seconds.

Another good use for the RAMdisk lies in the field of tele-computing. Having the RAMBO XL is just like having a double-density disk drive inside your machine,

only better! The RAMBO XL supports a 192K RAMdisk, while a single-sided double-density disk is 180K. The disk drive is a mechanical device which suffers wear-and-tear, and which takes time to physically operate. The RAMdisk operates at machine speeds, and makes hard disk drives appear slow. It is totally solid state in nature, and so suffers no wear-and-tear.

If you do any tele-computing, then perhaps the RAMBO XL might be for you. ICD has a BBS which is up 24 hours every day at (815) 968-2229 and which supports 300/1200/2400 with XMODEM downloading. You'll be able to find RAMBO XL support files there.

As good as the RAMdisk is, however, there is more. Advanced programmers can bank switch the RAMBO XL, dividing the 256K of memory into 16 banks of 16K each. The RAMBO XL manual gives information on bank switching.

If you have an 800XL, and would like to upgrade your machine not only to be compatible with the 130XE, but also to be a super version of the 130XE, then the RAMBO XL is certainly worth looking into.

[ICD, Inc., 1220 Rock Street, Rockford, IL 61101, (815) 968-2229. List price is \$39.95; buyer must supply eight 256K DRAMS for this project.]

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SUPERBASE PERSONAL

Relational Database Management for Tyros

Review by John Barnes

A "user-friendly" relational database for the Atari ST is as elusive as the Holy Grail. This review examines *Superbase Personal* as the latest candidate in this field. In addition to the "intuitive" GEM interface there are glitzy features such as the ability to store pictures and documents in your database.

Will those in the Atari ST world who disdain programming finally be able to organize their lists nicely? A *Current Notes* author, who is engaged in reconstructing the history of his World War II fighter squadron, recently raved about *SuperBase Personal* as the tool that let him get some real work out of his Atari ST. If a product can generate this much enthusiasm in a database beginner, it must be a product worthy of some consideration.

It turns out that my colleague just likes the way the program lets him print out up to four mailing labels across without having to

write a program. His struggle with this task in *dBMAN* had proved unrewarding. He also missed the "point and click" simplicity of other GEM programs when it came time to update the records in his lists.

Features

SuperBase Personal (SB) is easy to install and use. There is no protection. The GEM interface makes it easy to define the structure of the database. *SB* provides the user with complete flexibility in specifying field lengths and in modifying the form of records. Best of all, *SB* does not lose the trailing part of a field when you shrink its length.

You can have pictures or text documents as entries in your database. This opens up a great many possibilities. "Input Filters" make it easy to build in limited integrity checks on input data.

The vital "Import" and

"Export" functions allow you to bring in lists from outside your database system and to output them so you can use them with other software (a spreadsheet or graphing program, for example).

The "Query" feature in *SB* is able to link several files together. There is a built-in report generator that embodies a couple of nice functions for structuring reports. *SuperBase Personal* claims that it is "relational" in nature. More on that later.

SB provides pretty good control over your display with table, record, and form viewing capabilities. The adjustable windows and columns along with the changeable field order make it possible to view tables quite conveniently. Record filters provide a convenient way to focus on a subset of the data.

Making a List

The only way to measure the agony of working with a database is to build one of your own. I tried a couple of different things. The one that looked best was a list of my *Current Notes* articles wherein the external file field contains an abstract for the article. This function is worth pursuing because it is not easy to do in *dBMAN*.

The basic process of defining the files and fields for this database proceeded smoothly enough, although I discovered that it is difficult to modify a field name. I built two files, the first was a list of disk files containing the text of the articles, the second contained the titles, a pointer to the abstract, submission dates, publication

Desk Project Record Process Set System					11:33
Superbase: ARTIC2 indexed on Filename					
Filename	Abstract	Written	Publishe	Pages	Title
DATABASE	DATABASE.ABS	11-13-87	1-0-1	0.00	How to Avoid Bad Database Ma
DATATRV	DATATRV.TXT	11-10-87	12-1-87	4.50	Datatrieve - an ST File Mana
DBMAN	DBMAN.TXT	10-1-87	11-1-87	0.00	dBMAN - Industrial Strength
DATATRV	DATATRV.TXT	11-10-87	12-1-87	4.50	Datatrieve - an ST File Mana
DATABASE	DATABASE.ABS	11-13-87	1-0-1	0.00	How to Avoid Bad Database Ma
DATABASE.ABS					
How to Avoid Bad Database Managers					
Sets forth criteria for evaluating database management software. "File Managers" and relational products are considered. The article lists 9 criteria for evaluating database management products.					

dates, and other related information. The file name (without the extension) serves as a link between these two lists. The figure below shows the basic record viewing screen for the titles list in this application.

Once I had defined the structure of my database I had to get some data into it. I used *DO_IT!* to make an ASCII file containing the names of the files in the Current Notes folder on my disk drive. After editing the file into a suitable form, I used the Import function in *SB* to get this data into its database file. I then used *SB's* record operations to get rid of a few file names that did not belong in the list.

Once I had a printed version of this list in hand, I went back to *WordPerfect* to look up the titles and to make abstracts for the articles. I entered the information into the titles file by hand using *SB's* record functions. I then played with various ways of filtering, querying, and sorting the files to make various ordered lists.

These functions were accessed in a reasonably natural way from GEM buttons and drop down menus, avoiding the sometime tortuous syntactic requirements of *dbMAN's* command line statements.

With a little more persistence, I was able to use the "Query" functions to make new database files by performing the equivalent of the "Project", "Join", and "Intersect" functions of the relational algebra. This capability sets *Superbase Personal* apart from database managers of the "file manager" ilk. The ability to do this without a programming language should prove attractive to those who do not want to tackle *dbMAN*.

After some more browsing around I felt reasonably comfortable with what was going on.

Flies in the Ointment

Once I understood what *SB* did, I could evaluate how well it does it. The criticisms that follow are partly matters of taste. None of them are fatal, but remedying them would result in a product that would get an A rather than a gentleman's C.

The operator interface leaves a lot to be desired. The drop down menus use obscure names and are quite jumbled. There should be a "Files" menu and "Select directory" should be on it, rather than in the "System" menu. I can discern no good reason for failing to use the standard ST file selector dialogs. The program needs an escape mechanism to abort processing that might have gone astray. There is also a need for a simple button to clear the screen, which can get quite cluttered when moving back and forth in table view mode. This product needs to provide some online help.

Boom Box Buttons

SB uses a "boom box" metaphor for controlling the record pointer. The row of little buttons along the bottom of the illustration control record selection in the same manner as the buttons on a tape recorder: rewind, fast forward, stop, etc. I hate it. These functions should be placed on the "F" keys. Grabbing the mouse and clicking firmly on one of the boom box buttons is simply too slow. Some, but not all, of the other drop-down menu functions are on Alt keys. "Remove Record" is a function that ought to be on a key somewhere (perhaps Ctrl-Del?). An "Undelete" function might also be handy.

The horizontal slider is good for looking at wide tables. Why can't we have a vertical slider bar

for moving forward and backward through our tables?

The mouse pointer should be more functional in the table viewing mode. You should be able to point to a record and bring it up for editing, removal, or duplication.

There is also too much pointing and clicking in the structure definition dialogue. It is silly to use the mouse to run a counter up or down when a couple of key strokes would do nicely. Keyboard alternatives to the button selections (a la *WordPerfect*) would be nice here. Also, some of the buttons are kind of dinky, requiring extra care in mouse positioning. Certain dialog boxes should use a default selection (one you can select by hitting RETURN).

The documentation, while it is far better than some, could use clearer writing and better organization. Clear, concise explanations are lacking and the order is jumbled. At least there is an index, but it could use a few more entries ("recalculation", for example). The examples are too boring to be instructive. The overall feel can best be described as "tacky", although it is functional.

SB's claim to a "relational" character comes into play only in the query process, when fields from different files can be linked together in the query output. I will accept this use of the term "relational", although I prefer to reserve it for those database systems that can maintain a continuous linkage between multiple open files.

While *SB* lets you (and in some cases requires you to) have multiple open files, flipping back and forth between them is awkward because there is only a single window for record viewing and the record pointers are not relationally linked.

The program could do a better job on calculated fields. These

should be updated whenever a component of the calculation is changed. The user should not have to click on the field or save the record to force recalculation. If manual recalculation is desirable to enhance speed, this should be a settable option.

At the present time *SB* does not have command language support. *Superbase Professional*, which features a BASIC-like language, is supposedly in the works, but I have only heard of an Amiga version. Users whose applications require a language-driven database manager will have to be content with *oBMAN* for a while longer. If you really want pictures and external text files as part of

your database, try *Superbase*.

SB provides for Password protection, but I think this is silly on the ST, because there is no privileged user mode for altering or recovering passwords. God help you if you forget the password.

Conclusion

This Holy Grail is a bit tarnished. It is suitable for dining off of, but not for worshipping. As I mentioned above, I would give the product a "C" for a final grade.

Most Atari ST users can maintain a simple database file. If this is all you need, you might try a less expensive product, like *File Mana-*

ger ST or *Datatrieve*. On the other hand, designing a database for an application that requires multiple files with links between them is much more of a challenge. However, relational database technology is an active field because the results justify the effort.

I can visualize a structure of a WWII pilot's database in which the names of the pilots are linked to pictures of the aircraft they flew, to the names of their planes, to the missions they performed, to the places they endured, and to the losses they suffered. Maps, photographs, and memoirs would be tied together in a way that would bring the jungles of New Guinea to life on the screen. Some day

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PIRATES OF THE BARBARY COAST

The Right Mix of Action, Strategy, and Planning

By Lincoln Hallen

Pirates of the Barbary Coast has an interesting mix of strategy and action I like to see in any game. The game is set during the times when pirates ruled along the Barbary coast off North Africa. Players trade goods in various ports to survive and to make enough money to pay a ransom to Bloodthroat the Pirate who has kidnapped your daughter.

Going from port to port is, of course, dangerous since there are other pirates out to sink you. You defend yourself by loading and firing your cannon. If you inflict enough damage, you can board the pirate ship and read the ship's log for clues or seize its booty.

I found the mix of action, strategy, and planning the most interesting feature of this single person game. You have to remember to keep your crew fed, to keep notes on which ports give the best deals, and to keep track of clues and riddles. In addition you must also become efficient in loading your cannon. This requires that you practice loading your cannon just as sailors had to long ago (put in the powder, tamp it down, put in the ball, and brush out the barrel). Finally, you are ready to fire the cannon which also takes practice since you must judge the correct elevation before firing. You are also able to look for buried treasure and may have to fight Bloodthroat if you meet him while going around the islands.

The clues and trading features change each time you play, but after a few times you can figure the game out, and the challenge is not as formidable.

Pirates performed very well although I did run into a few problems. I got stuck a few times when learning the game and had to reboot and start over. The cover of the box showed a number of interesting graphics but the graphics must have been for an ST or Mac because the 130XE I used displayed mediocre pictures of only about six scenes. In addition, the developers advertised "animated graphics" but the only animation I saw was a picture of a pirate ship moving across the horizon like a homemade arcade game. Although sound is used, its use is so minimal that it has little impact on the performance of the game.

The traders, on the other hand, are very clever, always looking for the highest demand on the various items they trade in. Such demands can change frequently, and once the word gets out that certain items are bringing high prices at certain ports, many people try trading them there causing the prices to fall. However, if you try to cheat or lower the price too much, you are locked out from doing any trading! A good player will take notes to figure out the best

places for trading and to keep track of the other clues. The software simulation from this standpoint is quite good.

Documentation is of average quality. Certain key facts were not given which made learning to play a bit frustrating. For example, the instructions do not tell you that, when loading your cannon, you can load several cannons at the same time. It was nearly impossible to keep up by trying to load a single cannon each time to take a shot at the pirate's ship.

I think the game is easy to use. By following the instructions and skillfully moving around the joystick, you can attain the skills necessary to play the game. *Pirates of the Barbary Coast* by StarSoft Development Laboratories should complement anyone's software library.

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Daisy-Dot

I downloaded *Daisy-Dot* (D-D) (Novatari Utility Disk, #10) almost two years ago. I was just about to send away for an \$80 upgrade chip for my RX-80 so I could get NLQ printouts. I'm glad I kept my money because I was really impressed with D-D! Roy Goldman had created a printing utility that produced a quality of print unavailable in any of the printer drivers for 8 bit word processors.

D-D's features include a choice of five fonts, four graphic densities, proportional fonts, flexible character spacing, a font editor, 91 ASCII characters and 14 commands. D-D comes with a complete documentation file that takes you through the steps necessary to print out a file.

In short, you take your *Atari-writer+*, *Paperclip*, *Textpro*, *SpeedScript* or *Letter Perfect* file and print them to disk. Then you load D-D and select your font, file to print, density and spacing options and you are ready to print. D-D does a good job on text files, although two-column output is not supported.

This brings us the the best part. Somebody called The Wizard has taken Roy Goldman's D-D and added more features while making it much easier to use--enter Dot-Magic (DMG)--the Daisy-Dot II program you may have read about in computer publications. DMG uses D-D fonts and comes with nine fonts, prints double width, underlines, supports Prowriter as well as Epson, allows picture files in two sizes to be added to text and retains all the other features in D-D. DMG also has a correctable typewriter mode and a custom address label maker with up to 99 copies. The documentation file is a treat to print out and read. It demonstrates all the features of the program.

Both programs are included on their respective sides of the disk. DMG offers even more utilities and

further documentation if you write to the author at the address included on the disk docs. A contribution is requested and I feel it is justified by the sharing of such a full-featured program. It may take a while to get the feel of the way you use DMG's options, but, if you want near letter quality output, it is worth it!

--Roy Brooks

Space Lords

Okay, I give in. I have tried to play *Space Lords* (Novatari Game Disk #16) for several months, but just could not get into the game. I could not believe that everyone I knew that was into games was really enjoying *Space Lords*. And then I finally did what I usually advise everyone to do--I looked on the disk to see if there were any text or doc files. Lo and behold, there were three of them. There was a lot more to the game than I had imagined. After setting the system up and playing just a couple of games, I was actually enjoying it.

Space Lords is a very good strategy game with adequate graphics and a reasonable enough amount of real time play that keeps your hand on the joystick during battles to effect a retreat or to activate shields against missiles launched from command satellites. Since this game can take hours, and even days, to play, most players will find the SAVE game feature particularly useful.

Just follow the instructions and try playing against the computer while it controls two or three other *Space Lords*. Of course, these other *Space Lords* could be other players. Attack as many planets as possible in the beginning since this will be when they are at their weakest, especially if you have selected the option that allows neutral planets to build additional missiles.

--Alan Friedman

Print Shop Icons

Utility Disks #15, #17, and #30 are chock full of print shop icons, hundreds and hundreds of icons. If you are into *Print Shop*, then these disks are for you. There are Atari icons, Boy Scout icons, cartoon icons, and more. For anyone not familiar with *Print Shop*, it is a commercial software program for making signs, banners, cards and letterheads with your printer. You select the picture (icon) you want to work with from your icon disk. The more icons you have, the more variety you can have in your creations. With these disks and the ones that come with *Print Shop*, you should have available any icon you need.

--Alan Friedman

Print Shop Utilities

You may be wondering what you can do with *Print Shop* icons if you don't own *Print Shop*. Well, Utility Disk #34, can be used to make labels that utilize these icons or to convert the *Print Shop* icons to Atari DOS format and then create labels that not only use these icons but print the text in any Atari font including some unique fonts on this disk. Another utility lets you make a directory of the icons on a disk (very helpful when you are looking for a particular font.)

This is a double-sided disk. The front side of the disk consists of machine language programs and special fonts. The reverse side contains additional programs and all the documentation files.

--Alan Friedman

Adventurer's Companion

I don't have the patience or time to figure out long, involved text and adventure games. If you are like me and have several text adventure games lying around that you never solved, then Novatari Demo Disk #10 may be the grea-

test disk in the Novatari PD library. This disk contains the solutions to 11 different games—not clues to help you along, but the actual solutions. With this disk you can solve *Dark Crystals*, *Hitchhiker's Guide*, *Cutthroat*, *Ghosttown*, *Infidel*, *Mask of the Sun*, *Mission Asteroid*, *Pyramid of Doom*, *Pirate Adventure*, *Witness* and *Deadline*. This, of course, takes the challenge out of these games, but after months—maybe years—of frustration, you may enjoy the FINAL SOLUTION.

—Alan Friedman

General Ledger & Smartsheet

From our friends in Australia comes disk #37: The General Ledger and Smartsheet. *General Ledger* is a full double-entry bookkeeping system that can handle up to 99 accounts and 1000 transactions. The documentation is exceptional and there are example files on the disk. *Smartsheet* is a spreadsheet that is capable of doing financial forecasting, budgeting and can be used as a general spreadsheet. It is in the Visicalc/Speedcalc format and also comes with good documentation.

—Alan Friedman

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DROPZONE

Going Defender One Better

Review by Joe Pietrafesa

Attention all *Defender* fanatics! Remember when you played Atari *Defender* in the arcade, on your Atari 2600, and even on your Atari 8-bit? Well, put those memories aside because the *Defender* of the future has come on to the scene for your Atari 8-bit computer.

The game, written and created by Archer Maclean for the Microdaft company, is called *Dropzone*. Maclean has come up with the idea of an old favorite and added a brand new twist to the game.

When the program is being loaded, you must hold down the Option key. The initial screen produces an image of the Microdaft logo in shiny, metallic letters. After a few seconds the game will begin to load for game play. Within a minute, maybe more, the game will be loaded. Brilliant colors engulf the upper portion of the screen as you see the heading "*Dropzone*" being printed along the top. Underneath the heading is the creator's name along with the date the game was copyrighted.

Beneath the heading you begin to see just what this game is all about. Soon, by merely touching the Start button, you will come face to face with your enemies, nine in all, waiting to defeat you. You see them in rows of three's. All are deadly, but some not as deadly as others. The point score for each nemesis is listed next to it. A SPORE, for example, is worth the most (750) while an undetermined amount is given for killing an ANDROID. By pressing the Start key or the fire button on your joystick, you begin your utterly impossible mission.

When you begin play, you will swear you have seen this place before. Can it be just like *Defender*? In the lower portion of the screen is a map of the entire surface of the planet. This allows

you to see where every alien is hiding. In the lower left corner are the number of troops you have left to defeat your foes. In the right hand corner you have bombs, which, when used, are devastating to each and every XENO that is on the screen at the time you blast.

It is *Defender*, right? Not exactly, but here's the twist. Instead of one spaceship fighting against mutants, you are one lonely human, carrying an anti-gravity, jet-propelled backpack and a heavy duty laser, your only

...you are one lonely
human, carrying an
antigravity, jet-
propelled backpack and
a heavy duty laser....

weapons with which to destroy the menacing aliens. Another difference is your ability to gain a force field. By pressing any key on the keyboard of your computer, you will be able to activate your cloak. The cloak is a type of force field that will protect you from the fire of your enemies. The cloak only lasts a short amount of time so be careful to use it wisely, but it is a great defense for stopping the aliens.

The object of your mission is very simple: try to save all of your men from the aliens and wipe the aliens out at the same time. Sound easy? Well, watch out! Like *Defender*, the aliens try to catch your men on the surface and bring them up to the top. Be careful, because once your men are touched by an alien they become androids, and if you try to help them, they will only kill you. So

you must destroy them before they destroy your other men or even you!

Simulated game play as seen by Joe Pietrafesa:

My human appears in the middle of the screen, right above the home base, his laser on and ready to go.

I can see my men along the surface. They are waiting to be saved. As I look on the screen and at the map, I can see swarms of angry aliens just waiting for battle.

I move down to pick up a man, and I am attacked by three PLANTERS! I manage to destroy all of those enemies and bring my man to safety (one of the seven to be rescued). I see five more PLANTERS on the horizon. I decide there are too many to handle for one person. I make sure all of them are on the big screen; then I press the space bar. BOOM! Every single one is destroyed by the bomb I just dropped.

I see three more men. I can only get one at a time, so I pick up the farthest one away. There is only one more enemy so I pursue him, knowing I have the advantage. I am getting closer.

Now I see he has one of my men. Oh no! I desperately try to shoot, but the PLANTER gets to the top of the screen. He now turns into a NEMESITE, which is crazier than a PLANTER. He is quick, and he catches me. A colorful explosion appears as my hero desintegrates into tiny particles.

Only two more troops left, but no more aliens either. I pick up the rest of the men and clear the board. I receive a 700-point bonus for saving seven men. (100 x 7).

Now comes the second board which is more challenging than the first. Right away I use a bomb because the enemy are just

swarming. Next I use my cloak. This gives me just enough time to destroy some SPORES and one BLUNDER STORM. The cloak wears off, and I am doomed. Immediately I am shot and blown up.

This is my last chance to save the world. I end up saving four more men. I see more PLANTERS, three left to be exact. I decide to use my last bomb. Wait ... Wait ... Now! I drop the bomb. I only got two of the enemy. One is left. My score is 9900. The PLANTER chases me. I try to outrun and outgun him, but to no avail. He catches me, and once again, I am destroyed. But that pushes me over the 10,000-point mark, and I am able to put my name in the *Dropzone* Hall of Fame.

Overall, I thought this was an excellent game because I used to love *Defender*. The graphics are excellent, and the colors and sound are superior to normal games played on the 8-bit. My only problems with this game were that at first it was hard to control my hero with the joystick. I found it difficult to maneuver and shoot at the same time, but, with a little practice, I was able to get the hang of it. Also, I found it extremely difficult to handle the joystick and to press the Space Bar in order to activate the bomb and even the cloak. At times I found myself having to stop to look at the keyboard to try to find the Space Bar; while I was looking, my man would be destroyed.

If you can live with these flaws, then the challenge awaits you. Can you save the planet from evil and deadly aliens? If you think you can, then what are you waiting for? By now you should find yourself being transferred into the *Dropzone*.

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JUNE, 1988

#250: CLIP ART NO. 11: Food
2. 22 more screens of clip art of food-related pictures. Converted from Macintosh pics. Tinyview. 296K.

#249: CLIP ART NO. 10: Food
1. 27 screens of clip art of food-related pictures. Converted from Macintosh pics. Tinyview. 333K.

#248: CLIP ART NO. 9: Whimsy
21 screens of whimsical clip art converted from Macintosh pics. Picswitch07, tinyview. 297K

#247: CLIP ART NO. 8: Sports
24 screens of clip art for sporting events converted from Macintosh. Picswitch07. Tinyview. 282K

#246: CLIP ART NO. 7: Mac Art
2. Mac Art Library (28-51). 24 screens of Macintosh clip art. 325K. Picswitch07, Tinyview.

#245: CLIP ART NO. 6: Mac Art
1. Mac Art Library (1-27). Conversion of 27 screens of Macintosh clip art. 322K.

#244: MIDIPLAY DEMO. Demo of MIDIPLAY, Version 4.25 by Electronic Music Publishing House. Includes two songs: Mozart Gavotte and Bach G Minuet 2. Demo will play without a MIDI instrument, but to make full use of demo, a MIDI instrument is required.

#243: BOWLMAN, Version 1.22. A shareware program by George Terpening, Bowling Manager. This will help you keep track of bowling statistics for yourself, your team, and your league (up to 6 teams—a more complete version is available if you register). Single-sided disk, files ARC'd.

#242: UTILITY NO. 24 ARC SHELL II version 1.91 with disk and folder commands from within the shell. Desk Manager version 2.1 allows greater control on system startup. Ledbetter Utilities (L_UTILS) is a collection of four very useful utilities from the person that wrote the Express series of term and BBS programs. M2GRV2 is another manager program for those that use the Tempus editor with the TDI Modula-2 package rather than the editor that is included in that package. VT PRO is a powerful editor of VT52 graphics. DEGASAVE (from the ARC DEGASAP) is the program that redirects the Alt-Help key combination so that the screen is saved in DEGAS format instead of being

sent to the printer.

#241: VDOS (Virtual Disk Operating System) A shareware graphic interface from Marathon Press that allows easier access to your frequently used programs. This interface includes many command options frequently contained within command line interfaces (CLI's) but is much easier to use. This disk is a must if you have a hard disk and frequently use a variety of programs in one session.

#240: Game Disk No.14 BOG v1.2 (Boggle clone with dictionary) a word-finding game; Core Wars (based on Scientific American articles, a knowledge of assembly language programming is recommended); Escape (a pretty good adventure-type maze). All three games run in either medium or high resolution.

MAY, 1988

#239: CLIP ART NO. 5: Holidays and Headers. 28 screens full of excellent clip art. Disk includes PICSW7 and DSLIDE. For color or monochrome.

#238: PUBLISHING PARTNER UTILITY NO. 2. New PP fonts (CYRILLIC, HELVETIC, HUDSON, and SATURN). Printer Drivers (HPD, HPF, LQ1000F, NECP7D, NECP7F, and PS_PLUS). Font Editor (w/docs) for creating your own PP fonts.

#237: MUSIC STUDIO SONGS NO. 7. 35 more Music Studio songs. Disk includes 2 PD song players and a program to convert the 8-bit Advanced Music System (AMS) songs to Music Studio formats.

#236: PLAYIT DEMO NO. 2. More digitized sounds for your ST: ADAM12, DRAGNET, MR_ED, SUBETHER, and SYNCLOCK.

#235: CYBER DEMO DISK. (Four animations: CAMFILM, PSLOGO, RAISINS, and SAUCERB, with ANIMATE3.PRG)

#234: UTILITY DISK NO. 23. DSKSCAN1—ST Floppy Disk Manager V1.0/2.0, by Todd Burke. DSLIDE2—Deluxe Slideshow V2.0, shows all popular ST picture file formats. HDOPTIMZ—Atari ST File System Checker and Repairer, V1.1 and File System Compacter, by Barry Locklear. MEMFILE—Mem-File V1.3, a desk ACC to view and edit any portion of ST's memory, a file on any disk drive, or the

individual sectors of any drive. PENICILN — virus killer program. SDDFR12—Super Directory Data File Reader.

#233: SHEET. This is a shareware spreadsheet program by Mr. Chorming Lung. Complete docs included on disk.

#232: MODULA-2 SOURCE DISK NO.4. GEMMODUL—a very useful and large assortment of modules that ease the use of GEM functions. MATHTRAP—a collection of modules for adding more math functions. THEACC—an ACC that gives 2 formatting formats, numerous copying options and disk DOS type commands all in one ACC.

#231: C SOURCE DISK No. 8. Another collection of C source code. HACKSORC—source to the game HACK. PENICILN—contains the source code to an ACC to help protect against computer virus' as well as the ACC itself.

#230: MONO GAME DISK NO. 5. CRIBBAGE—play the computer in a game of Cribbage; DRAW-POKR—A very well-done game of draw poker. Also runs in color. MEGAMA11—Mega Maze 1.1 requires a joystick and is an adventure maze of sorts. Also runs in color.

APRIL, 1988

#229 - EASY DRAW UTILITY DISK. Fonts: (Chicago 7,10,14,18,28,36; Courier 7,10,14,18,28,36; and Calig (7,10,14,18,28,36); Easy Draw Art (18 GEM Pics: addressbk, alphabet, asset_p1, asset-p2, assissi, box_brd, callig, clip-tmp, dailcal, disk_lbl2, hi tech, line_brd, pd_art_1, pd_art_2, rocky, scrollbrd, swiss_vhs_lbl)

#228 - SUPERCHARGED EASY DRAW SLIDE DEMO (monochrome). A self-running demo of the capabilities provided by Migraph's new Super Charged Easy Draw.

#227 - CASTING D'ENTERPRISES by Propulse. An impressive demo of the animation and graphics capabilities of the ST. This French "film" runs for about 7 1/2 minutes.

#226 - FRACTAL ZOOM VERSION 6.A. This unique program lets you create a variety of fractals both at full screen resolution as well as in a smaller "preview" box.

CURRENT NOTES ST LIBRARY

Animation options lets you turn your fractals into a zooming movie. (color)

#225 - BREACH & EMPIRE. 14 additional scenarios for use with BREACH. A collection of maps for EMPIRE players as well as the fixsave.prg which allows owners of older versions of EMPIRE to use the play-by-mail option.

#224 - TOY PROLOG. This language operates exactly like the system described in Programming in Prolog by Clockrin & Mellish. (Note complete docs, but they are in GERMAN!).

#223 - C SOURCE DISK NO. 7. C source programs for ARC.TTP, a C compiler, formatting disks at 11 sectors/track, disk formatting program, code for accessing TNY file formats, and a cross assembler to 6809 CPU-based systems.

#222 - DESK PAK PLUS (Shareware) 10 desk accessories in a single file: clock, calendar, phone book, calculator, appointments, free ram, note pad, copy file, delete file, desktop.

#221 - UTILITY DISK NO. 22: ARCSHELL Version 1.8; ARC Accessory; DCFORMAT acc.; DIS-KFREE (speeds up - 10 fold - GEMDOS diskfree() function); FOLDXXXX (takes care of 40 folder limit in TOS); FSELV55 (replacement for GEM file selector box); SUPER BOOT 3.2 (all-in-one type boot program).

#220 - UTILITY DISK NO. 21: YOUR 1ST UTILITY DISK. Micro-Time Alarm Clock, ST Ramdisk and Printer Buffer, Clock/Calendar, ASCII Printout, DeARChiver, Disk Manager, Disk Directory Listing Program, and Accessory Selector and Resolution Setter.

MARCH, 1988

#219: DBMAN DEMO DISK. Demo version of the latest release (Ver 4.0) of dBMAN. Databases limited to a maximum of 20 records.

#218D: PLAY IT. (DS) Programs to input a sound file from ST Replay and output a file that can be played with either of the two player programs provided. Disk includes a collection of ready to play SND files. Here your ST Talk!

#217: MUSIC STUDIO NO. 6. Another 70+ songs for use with Music Studio. Includes PD player to create your own music albums.

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#216: MUSIC STUDIO NO. 5. Over 70 new songs for use with Music Studio. PD player to create your own music albums. MIDI (C).

#215D: A.I.M., Ver 2.3 (DS). Atari Image Management System (color or mono). Sophisticated image manipulation program from Germany that lets you perform math on images (can read in NEO and DEGAS pics).

#214: SPECTRUM 512 MOVIE ANIMATION. Imitation of Amiga demo that shows 4 monitor screens at the same time each with a different animated display.

#213: MONO GAME DISK NO. 5. Adventure writing system; Daleks - graphic strategy game; Krabat2 - play chess against the computer; Stocks and Bonds; Eliminator - interesting variation of card game; breakout.acc and reversi.acc.

#212: MONO GAME DISK NO. 4. Spacewar - battle Klingon cruiser; Megaroids - Asteroids clone, Runner (great arcade game!), Squixx (like QIX).

#211: GAME DISK NO. 13 For Younger Kids: 2 music prgs (Kid-music and Kidpiano); Make your own Mr. Potatoe Head with KidPotato; and KidMixup - display pics that tell a story.

#210: GAME DISK NO. 12 2 vers of Pacman; create jigsaw puzzles from DEGAS pics; drive race car around track; drive car to top of hill in widow maker, make yourself invincible in Time Bandit.

#209: GAME DISK NO. 11. Try your hand at Las Vegas: Poker, Black Jack, Roulette, and Slots. (C).

FEBRUARY, 1988

#208: GAME DISK NO. 10. Mil-borne; G-Ranger; NIM; Trucker; and Darts (C).

#207: STATISTICALLY ACCURATE BASEBALL. Shareware baseball strategy game (no graphics) includes data for four teams: '62 Giants, '70 Reds, '84 Cubs, and '86 Mets (C)

#206: UTILITY DISK #20. Ver 2.05 of BOOTUP (set screen and text colors on bootup; Epson font editor; calculator and limited screen plotter; fast disk copier; convert IFF picture files to Spectrum format; show Spectrum, Degas and NEO pics from one slide

program; convert AIM files to DEGAS.

#205: SPECTRUM SPACE PICTURES NO. 2. Apollo9,10; Astro1; Earth1,2; Earthris; Lem. spslide8.prg.

#204: SPECTRUM SPACE PICTURES NO. 1. Crab, Earth, Moon-flag, Orion, Nasa_p01,2,3, patch1, spslide8.prg.(C)

#203: SPECTRUM ANIMATED BALLS DEMO. 5 metal balls, hanging from rack, with first and last alternately swinging out and in. (C).

#202D: CYBER DEMOS AND UTILITIES. 4 animations: Chasers, Elmsk31c, scout, and texture. contains routines to create shadows and splines within CAD-3D,V2.0 (C) DSDD & 1MB.

#201: FLASH & INTERLINK UPDATES. All the files on this disk require either Flash 1.51 or Interlink. Prgs to create Flash DO files, to auto download and auto logon, to update Flash 1.51 to ver 1.52. Interlink files for ANSI emulation V1.12, and TXF transfer protocols including multixy which allows file transfers in the background.

#200. TELECOM DEMO DISK. 3 ARC'd working demos of new terminal programs: VTX< KIS and ST Talk Professional.

#199: MUSIC CONSTRUCTION SET SONGS. 32 songs w/ player.(C/M)

#198: MUSIC STUDIO SONG DISK 4. 75 songs w/player. (C)

#197: MUSIC STUDIO SONG DISK 3. 65 Songs w/player (C).

#194: VANTERM Version 2.3. New release (3/24) of this super terminal emulation package.

#176: ST WRITER ELITE, Ver. 2.52. Latest version (3/20). Supports multiple printers. English, German, and Spanish. Complete documentation.

All CURRENT NOTES Disks are \$4.00 each. Add \$1/(6 disks) for postage and handling. Order disks from CN LIBRARY, 122 N. Johnson Road, Sterling, VA 22170.

Discounts are available for larger orders. 10 or more disks (\$3.80 each); 20 or more (\$3.60 each); 30 or more (\$3.40 each); 40 or more (\$3.20 each). 50 or more (\$3.00 each). Maximum charge of \$6 for postage and handling.

Pinfeed disk labels for 3.5" disks are available for \$4/100.

These disks contain Mac programs in "Magic" format for use with the MAGIC SAC Macintosh emulator. Disks are \$4.00 each. Order from CN Library, 122 N. Johnson Rd, Sterling, VA 22170. Add \$1/6 disks for S&H.

M0: MAGIC SAC. Version 4.52, (or the most recent ver) of MAGIC program.

M2: TELECOM DISK No.1. BinHex 5.0, Free Term 1.8, FreeTerm.Doc, Kermit, Packit III (V1.3), Stuffit 1.0, TermWorks 1.3.

M3: UTILITY DISK No.1. DES, Font Doubler, MacDump, Mini Finder, Packit III (V1.3), Reverse Screen 1.0b1, RMove, Scan, Set File. SLICER. Version Reader 1.1, Write Stream.

M4: GAME DISK No.1. Backgammon, Bash Big Blue, Curves, MacLuff, MacYahtzee, Maze 3D, Meltdown, Missile Command, Munch, PepsiCas, Smile, Snow, Solitaire, Space Bubbles, Vax Runner II.

M5: DISK LIBRARIAN. Disk Librarian V1.82A. Disk Librarian Doc, Short Doc. Contains listing of CN MAGIC LIBRARY.

M6: GAME DISK No.20. Ashes, Black Box, Destroyer, HexPuzzle, Killer Kalah, MacPoly Demo, Office Attack, Point Symmetry Demo, Snake, Solitaire, Trophy List, Wall Game, Wheel.

M7: GAME DISK No.3. Ashes, Break the Bricks, Deep Ennui, Go, Mac Gunner, MacBugs, MacCommand, MacYahtzee, Wiz Fire 1.1

M8: DESK ACCESSORIES No.1. 3D TTT Game, Art Thief, Ascii, Bagels Game, Big Ben, Calculator, CopyFile, DA Tester 1.5, Delete File, Desk Acc. Tester, DeskZap 1.2, Eject&Reset, Extras, File Hacker DA, File Tools, Font Grapper+, Font Grapper3, Hex Calculator, HP 12c, MemScan, MemWindow, MerriMac BlackJack, MiniWriter, MockTerminal, MockWrite, Moire, MW Count, Other 3.0, Puzzle, Reader, Rubik's Cube, Sampler, Scrapbook, Scientific Calculator, SetFile 3.3, SkipFinder, TheBox, Tiler 1.5, Trails, Transfer, TrapList, Utils, Word Count, Zoom Idle.

M9: UTILITY DISK No.2. Bind Icons, Change Appl. Font, Convert Desk Acc., Desk Accessory Mover, File Hacker, FontDoubler, Index, Make-Screen, MicroFinder, PurgeIcons, RamAStart 1.3, REdit, ResEd, SelectPaint, Show Version, User Interface Demo.

M10: GRAPHICS DISK No.1. Amy, Artisto, ball demo, Big Ben, Brooke, Bugs, Curves, Display Message, Dragon, Fighting 51, Fourth Dimension, GARF, HotSex!, Liar's Club, Living Art, Max Headroom, Moire 3.0, Nightmare, Optical Illusion, Paint Grabber, Painter's Helper #1, Pattern*, Pisces, Rotations, Saddle, The Fourth Docs, ViewPaint 1.5.

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M12: MACBILLBOARD. Chipmunks, Donald & daisy, Goofy At Bat, Annoucement, Babe Ruth, Carrotprint, Classic illusions, Escher, Escher Hands, MacBILLBOARD (MacPaint clone), Max, Mickey and Minney, mm, Quick Tour, T-Shirt.

M13: FONT DISK No.1. Akashi, AlgBlurb, Algebra, Athens, Boxie, Dover, Geneva, Hood River, ImageWriter, LED, London, Los Angeles, Luxor, Mars, Monaco, Park Ave, Pica, Ravenna, Rome, Runes, San Francisco, Seattle, Steel Brush, Ultra Bodoni.

M14: FONT DISK No.2. Bookman, Courier, Coventry, Dali, Geneva, Hebrew, Manteco, Shadow Box, Sri Lanka, Times, Walla Walla, and font display 4.6 w/docs.

M15: GAME DISK No.4. Alice, Amps 3.0(B2), Bricks, Canfield 2.0, Iago, Lets Get Tanked!, MacHeads, Nim, Space Attack, Third Dimension.

M16: FONT DISK No.3. About Lachine, Alice, Avante Garde, Berkeley, Broadway, Camelot, Cartoon, Centura, Chancery, Eon, Exeter, Fallingwater, Fantaste Key, Fantaste!, Future, Ham, Helvitica, Hollywood, Lachine, Lineal, Madrid, Pittsburg, San Quentin, Silicon Valley, Stencil, Unicol plus DAFont2.da and SysFonts.da.

M17: DUNGEONS OF DOOM 4.0. Graphic adventure game.

M18: DESK ACCESSORIES No.2. About PopUp.txt, Alarm clock, Art Grapper+, Calculator+, Choose Scrapbook+, DA File, DA Tester 1.5, Disk Labeler, DiskInfo 1.45 + SICNs, Explorer, Gone Fishin', Hex Calc, Label Maker, MemWindow, MiniWRITER 1.34, Multi-Scrapbook, MW 4.5 Counter.DA, PopUp 1.0, Pro-Count, ReadPrinter, Ruler, SFStartup 1.0, Skipfinder 6.1, Sleep, Stars 1.6, Stars II, Sys-fonts, TeaTime, Timer.

M19: PINBALL CONSTRUCTION SET GAMES. Pinball Construction Set Player plus 12 Games: Apple, Black Hole, Face, KalinBall, Madonna, Minute-Mag, Patchwork Mess, Phantom, Pure-Gemme, Samurai, The Royal Pain, Wizards Lair.

M20: GAME DISK No.5. Chase'Em, Crystal Raider, Daleks, Golf MacWay, Kill File, Kill King, King.MacWrite, On-The-Contrary, StuntCopter 1.2.

M21: GAME DISK No.6. Guess, Hacker's Contest, Hot Air Balloon, Match, Ramm 1.0, Third Dimension, Trick-Track, Utaan Attack, Zero Gravity.

M22: GRAPHICS DISK No.2. BlowUp 3.0, BlowUp Notes, CalendarMaker 2.2.1, Dynamo, Graphic, MadMenus, Math21, Rays, Simutree, Spiro, Tree, Vanlandingham.

M23: VAMPIRE CASTLE. Graphic adventure game.

M24: DEEP ANGST. Graphic adventure game. 1 Mb ST only.

M25: GAME DISK No.7. Billiards, Cross Master Demo, Flash Cards, Hangman-9.0, MacLuff, Master Guess, Safari 1.0, Venn.

M26: GRAPHICS DISK No.3. 3D Sketch, AniRama, Bin/Graphics, Brownian Motion, Control, Fractal Contours, Fractals, Icon Collector, Julia, MakePaint, Melting Clock, Small View, ShapeArt, StarFlight, Window Demo.

M27: UTILITY DISK No.3. Browse/Shazam!, Clocks: analog & digital, Edit, FEdit 3.0, launch, lazymenu, Magic Beep 1.0, Menu Editor, microFinder, Quick Dir, Quick Print, Ram-Start2.0+, Road Atlas, ShrinkToFit, SincEdit, SortMenu, SortMenu Code, SuperFinder4.0, TabsOut, Unpit, WayStation.

M28: RED RYDER 7.0. Red Ryder 7.0, Red's 7.0 Stuff, RR7.0 Macros, RR Docs.

M29: PCS PLAYER No.2. Pinball Construction Set Player plus Games: Circus Circus, D & D, Diadora, Max, Merlin, Modern Mistress, Question, The Royal Pain, Twilight Zone, Whazit.

M30: GAME DISK No.8. Bowl-A-Rama, MacTrek 1.1, Mystery Box 1.0, Shots, Star Trek Trivia Quiz, Window Blaster 1.0.

M31: BLACK WIZARD. Graphic adventure game by Richard Loggins.

M32: FONT DISK No.4. Canberra, Chicago, Humanistic, Music, New Dali, Palencia Application, Palo Alto, Pioneer Shadow plus F/DA sorter and Font Tester.

M33: CLIP ART No.1. AirCraft, Business, Car Logos, Cars & Trucks, Clip Art Demo, Disney, Eyeballs, Flowers, Misc, Seasons, Trees1, Trees2, ViewPaint 1.5.

M34: GAME DISK No.9. 1000 Miles, Asteroids, Cairo ShootOut!, Donkey Doo, Duck Hunt, Pente 1.0.

M35: FONT DISK No.5. Beehive, Beverly Hills, Boise, Chicago, Courier, DeStijl, Ham, Happy Canyon, Helvitica, Mod. Chicago, Old English, Square Serif, Sri Lanka, Worksheet.

M36: CASTLE OF ERT. Shareware graphic adventure game.

M37: MAC-A-MUG PRO DEMO. Version 1.0. Create your own mug shots by combining a variety of different facial features.

M38: VIDEO WORKS PLAYER #1. PD player for Video works animated screens. Includes 11 movies.

M39: DEMO DISK #2. Demos of Anatomiser (learn human anatomy), DeskPaint (desk acc MacPaint clone), and SuperPaint (graphic program with both MacPaint and MacDraw features).

M40: HACK, Version 1.03. Game is similar to Rogue, includes manual with full docs.

M41: RADICAL CASTLE. Graphic/text adventure game.

M42: FONT DISK No.6. 15 new fonts: Berlin, Boston II, Courier, Dorza, Highwood, MicroBoston, MiniBoston, New York, Palo Alto, Sparta, Stiletto, Symbol, Tatooine, Venice, Wartburg.

M43: UTILITIES No.4. DiskDup+, MacSnoop 1.03, RamDisk+ 1.4, ResTools 2.01, Oasis 2.01 (HFS), Font Librarian (HFS), Switch.

M44: FONT DISK No.7. 18 new fonts: 42nd Street, Aldous, Art Deco, Ascii, Blockbuster, Border, Clairvaux with docs, Coptic, Deep Box, Ivy League, Klingon, Las Vegas, Little Box, Madrid, Memphis, Minneapolis, Rivendell, Spokane.

M45: GAME DISK No.10. Blackjack 4.0, Gunshy 1.0, Humpback, New Social Climber, Panic, Puzzle 1.0, Star Trek Trivia Quiz, Video Poker.

M46: DA DISK No. 2. 35 DAs: 3D Tic-Tac-Toe, A-Bus ID Poker, Abacus, Calendar, CheapPaint, Collapse, ConCode, Crabs2, DAFile, DAFont, Disp.Msg, Double Apple, Executive Decision, FatMouse, FixPic2.0, Flow, Fun House, Func Keys, Font, Idle, KeyMouse, KnockOut, Multi-Scrap, MW to Text, New MiniDos, Orig Clock, PaintDA, Poker, ProCount, Ruler, Tiler 1.5, Timelogger2.11, Utilities, Wrap, WXModem, Sample It.

M47: GRAPHICS No.4. Cursor Designer, Earthplot3.0, Graphics2.0, Mondrian1.0, MotionMaker2.0, Moving Finger, Wallpaper, Zoomation.

M48D: HYPERSTACKS No.1. Address, Databook, Fractal, Funy Day, Home Desk, HyperNews 1.2, HyperZoetropes, MacGallery, MacVermont #2, Notebook, Periodic Table, and ResEdit IPS. (Double-Sided)

M49D: HYPERSTAKCS No.2. Ear, Illusions, Passing Notes, Shipstack, Silly, and US States V2. (Double-Sided) NOTE M48 and M49 require HyperDA and some form of DA tester (Sample It! on M46 or DA Tester 1.5 on M8 or M18).

M50: FONTS #8. Alderney 9-48; Cairo 18; Cyrillic 12; Greek 10,20; Paint 18; Playbill 12,18,24; Rehovot 10,12,20,24; Runes 12,24; Washington 12; Zodiac 18.

M51: GAME DISK NO. 11. Bouncing Balls, Fire Zone, Mac Word Hunt 2.0, Out Flank, Risk and Word Search.

NOVATARI XL/XE PUBLIC DOMAIN LIBRARY

The price for mail orders is \$3 per disk plus \$1 for postage and handling for every 3 disks. Send checks, payable to NOVATARI, to Alan Friedman, 5951 Heritage Square Drive, Burke, VA 22015.

Any user group librarians who are willing to trade library disks write or call Roy Brooks, 4020 Travis Parkway, Annadale, VA. 22003, phone 703 750 0146. We trade with groups all over the world.

Demos

- 1: Miscellaneous
- 2: Movie Maker Clips
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- 5: Desktop DOS + Demos
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- 7: Mandelbrot fractal graphics
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- 9: WIZARD of OZ
- 10: Adventurers Companion

Education

- 1: Mathematics
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- 8: Basic Math
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- 15: Two Graphic Adventure Games
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- 18: Machine Language Games
- 19: Dandy Dungeon

Language

- 1: Fig-FORTH
- 2: ACTION! source codes
(cf. GAMES 7)
- 3: ACTION! Graphic Demos
- 4: ACTION! Utility Programs
- 5: ACTION! Modules #1
- 6: ACTION! Modules #2
- 7: BASIC XL-REF Base
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- 9: KERMIT telecom
- 10: TURBO BASIC
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- 12: Searcher XL Turbo
- 13: Turbo Basic for 400/800
- 14: C Language

Music

- 1: TV/MOVIE Themes
- 2: ROCK
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- 5: Ams Player: 12 Rock Songs
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- 8: Ams Player: 18 Classics
- 9: Ram130 AMS Beetles' Songs
- 10: MUSIC COMPOSER Songs
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- 12: Music Major

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- 1: MISCELLANEOUS introduction
- 2: Printers
- 3: DOS 2.5
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- 31: Hacker's Toolkit
- 32: Weekly Scheduler
- 33: Textpro 2.5r (telecom)
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- 35: Monitor/Debugger
- 36: Diet & Nutrition
- 37: General Ledger
- 38: Super Copiers
- 39: Atari Writer Drivers

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- 1: 850 Interface
- 2: 835/1030 Modem
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- 5A&B Chameleon Terminal Emulator
- 6: 1030&850 Express (3.0 & 2.1)
- 7: Data Comm
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NOVATARI

Northern VA Atari Users' Group

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VP-8BIT	Alan Friedman	703-425-0575
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New Members: Dues are \$20/year/family which includes a subscription to *CURRENT NOTES* and access to more activities. Join at the main meeting or at a chapter meeting or by sending \$20, payable to NOVATARI, to Earl Lilley, 821 Ninovan Rd. SE, Vienna, VA 22180.

Novatari Main meeting meets the second Sunday of the month at the Washington Gas Light Building, 6801 Industrial Rd, Springfield, VA. Take 495 to east on Braddock Rd. (620) to south on Backlick Rd. (617). Left on Industrial Rd. Washington GasLight is the second building on the right. 5:30 Telecom SIG; 6:15 announcements, open forum, door prizes; 6:45 VAST and 8BIT SIG meetings. **M. Vernon/Hybla Valley**, 1st Thursday, 7:30 Contact Ron Peters at 780-0963. **Sterling**, Sterling Library, 7:30-9:30, 1st Wed. Contact Milo Flagel at 471-5273.

BBS: Access to the BBS' requires a fee in addition to the dues. This fee is \$5/year for NOVATARI members and \$7.50 for members of other WAACE clubs, \$10 for other nonWAACE users. BBS access fees are to be made payable to "NOVATARI" and sent to: Ed Seward, PO Box 541, Vienna, VA 22180.

President's Report

ARMUDIC contest winner will be announced at June 12th meeting. 2400 baud modem will be awarded.

New names have been added to the "Hot List" since it was published in the April issue. Ken says he has had calls from as far away as Texas and California from the April listing. When California Atarians call east coast instead of Atari west coast UGs, we wonder.

Congratulations to the new Atari Computer Division's newsletter Atari User Group News. It will come monthly to the representative of each User Group to help us keep abreast of the UG news, new developments, and technical information. (Look for my condensations on ARMUDIC.) From reading the first issue by editor Elizabeth Shook it is not clear whether 8-bit is to be included in the Atari Computer division or whether it has been downgraded to the Atari Games Division. Let it be known that NOVATARI's 8-bitters are serious computer users, and should be included. I spoke to Elizabeth and she is investigating.

A.U.R.A.

Atari Users Regional Association

President.....	Steven Rudolph.....	301-464-0835
8-bit VP	Bob Langsdale	301-390-6554
16-bit VP	James Bonbright, Jr.	301-933-4891
Treasurer	Bob Brock.....	301-268-2554
Membership.....	Dave van Allen.....	301-593-4654
8-bit Libr	Wayne Heiden.....	301-330-0130
16-bit Libr	Herb Lane.....	202-332-3618
Equipment	Jesse Ayer.....	301-345-1592
Facilities.....	Richard Stoll	301-946-8435
Used Equip	Lincoln Hallen.....	301-460-5060

* AURA Has New Meeting Place *

Meetings - Beginning June 16th, we will be meeting in the Multipurpose room at the GRACE EPISCOPAL SCHOOL in Kensington Maryland. Grace Episcopal School is located on Connecticut Avenue, 1/4 mile north of the Connecticut Avenue (North) exit, on the east side of the street. We will continue to meet on the third Thursday of the month. Library sales begin at 7:00, the meeting begins at 7:30. We will continue having separate XL and ST demonstrations. **DOOR !!!!**

Correspondence. All correspondence, including membership renewals, changes of address, etc. should be sent to: AURA, P. O. Box 7761, Silver Spring, MD 20910. AURA cannot guarantee *CURRENT NOTES* subscription fulfillment unless the member provides written confirmation of address changes, renewals, etc. to the address given above.

New Members. Dues are \$20/year and include subscription to *CURRENT NOTES*. Send name, address, phone number, and check to above address.

April Meeting. The meeting theme was graphics output. Bob Brock and Linc Hallen demonstrated some of the XLent line of software products producing enhanced text and pictures. Steve Rudolph demonstrated a color inkjet printer with DEGAS and Maps & Legends showing that hi-rez, vibrant color, the major feature of the ST, is useful for more than games. Both demonstrations were wellattended and ran over the

scheduled time.

All attendees were given questionnaires to complete. These forms will give the officers the information on the members equipment, uses and interests; valuable information to be used for planning future meetings. We will have copies at the next couple of meetings for those who missed the April meeting.

Herb Lane (16-bit Librarian) has made good progress in developing a database for our PD library. This will make it much easier to close in on those disks that contain the desired files.

Door prizes were given and again were well-received. This month we gave out a videotape, joystick adapters, and diskettes. Do to popular demand, we'll continue door prizes for awhile.

N.C.A.U.G.

National Capital Atari Users' Group

President..... Peter Kilcullen 202-296-5700
Vice President.. Mike Pollak 703-768-7669
Treasurer..... Allen H. Lerman 301-460-0289
XL/XE Librarian Mike Pollak 703-768-7669
ST Librarian Enrique Seale 202-295-0112

Meetings: 3rd Tuesday, 5:30 - 8:30 pm, room 543, National Science Foundation offices, 1800 G St., NW, Washington, DC. Closest subway stop is Farragut West on the Blue and Orange lines. Building is identified by sign for Madison National Bank on the corner. Front entrance is on west side of 18th between F and G.

New Members: Membership dues are \$20 and include a subscription to *CURRENT NOTES*. Join at the meeting or send check, payable to NCAUG, to Allen Lerman, 14905 Waterway Dr, Rockville, MD 20853.

W.A.C.U.G.

Woodbridge Atari Computer Users' Group

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16Bit VP Darrell Stiles 703-494-9819
8-Bit Board Rep Stan Rupert 703-670-3338
ST VP Bill Parker 703-680-3941
ST Board Rep... Bill Brooks..... 703-895-5404
Treasurer..... Chris Moore 703-670-5143
Secretary..... Frank Bassett 703-670-8780
Librarian Mike Stringer 703-791-3331
Past President.. Jack Holtzhauer 703-670-6475

Meetings: 7-10PM, Community Room, Potomac Branch, Prince William County Library, Opitz Blvd., Woodbridge, VA. Entering Woodbridge from either North or South on Route 1, proceed to the intersection of Route 1 and Opitz Blvd. (opposite Woodbridge Lincoln-Mercury). Turn West on Opitz and take first left turn into the library's parking lot. The Community Room is located to your left immediately upon entering the main building. Meeting Dates: Feb. 9, Mar. 8, Apr. 19, May 10, June 13.

New Members: Initial membership fee is \$10/yr plus \$1 monthly dues. Membership includes a subscription to *CURRENT NOTES*. Join at meeting or send check, payable to WACUG, to Frank W. Bassett, 15313 Blacksmith Terr, Woodbridge, VA 22191.

S.M.A.U.G.

So. Maryland Atari Users' Group

President..... Terry Daniels 301-292-7594
Secretary..... Fred Brown 301-645-4009
Treasurer..... Samuel Schrinar 301-843-7916
Newsletter Ed ... Leroy Olson 301-743-2200
Librarian Sherwood Conner 301-292-5752

Meetings: 2nd Thursday, 7:30 pm, John Hanson Middle School in Waldorf, MD. Traveling thru Waldorf either east or west on Rt 5, exit on Vivian Adams located 200 ft west of Waldorf Carpets & Draperies and directly across from the Village Square sign.

New Members: Membership dues are \$20 and include a subscription to *CURRENT NOTES*. Join at the meeting or send check, payable to SMAUG, to Sam Schrinar, 2032 Alehouse Court, Waldorf, MD 20601.

F.A.C.E.

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President..... Chris Rietman 301-663-0325
Vice President.. Mike Kerwin 301-845-4477
Treasurer..... Buddy Smallwood 717-485-4714
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Bulletin Board 301-865-5569

Meetings: 4th Tuesday, 7 - 9:30 pm, Walkersville High School, MD Route 194, one mile north of MD Route 26 (Liberty Road).

New Members: Dues are \$25/year/family and include a subscription to *CURRENT NOTES*. Join at meeting or send check, payable to FACE, to Buddy Smallwood, PO Box 2026, Frederick, MD 21701.

M.A.C.C.

Maryland Atari Computer Club

President..... Jim Hill 301-461-7556
Vice-President Dan Honick 301-356-6453
Treasurer..... John Cromwell 301-356-6453
Secretary..... Bob Brent 301-254-3896
8-bit Librarian.. Cam Whetstone 301-486-2609
ST Librarian CVharles Smeton (none)
Newsletter Editor Tim Caldwell 301-687-1413

Meetings are held on the last Tuesday of every month at 6:30 pm at the Pikesville Library located 1 mile east on Reisterstown Rd, Exit 20 off the Baltimore beltway. Turn left into parking lot at the fifth traffic light.

New Members. Club dues are \$22 per year, and include a subscription to *Current Notes*. Join at the meeting or mail check, payable to M.A.C.C., to James Hill, 8591 Wheatfield Way, Ellicott City, MD 21043.

CLASSIFIED ADS

Classified ads are free to subscribers of CURRENT NOTES (\$0.10/word for others). Send your ad to CN CLASSIFIED, 122 N. Johnson Rd., Sterling, VA 22170.

FOR SALE: GFA BASIC (Interpreter) for the ST; Swiftcalc (Timeworks) for the ST; Tandy CM5 Color Monitor (TTL RGB). Best offer for each or all three. Call Robert Vider at 301-464-2778 (evenings and weekends) or 202-371-1211 (work-days).

ATARI 520ST for sale, with color monitor, 1 disk drive, Star SG-10 printer and a lot of software, including Publishing Partner, Thunder, and more, \$700. Also, an Amdek Color 1 composite monitor, best reasonable offer. Call 301-949-7356.

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ALABAMA: Huntsville AUG, 3911 W. Crestview, Huntsville 35816 205-534-1815.

ARKANSAS: Little Rock Atari Addicts, 28 John Hancock Cir, Jacksonville 72076 501-985-2131.

CALIFORNIA: Atari Bay Area Computer Users Society, PO Box 22212, San Francisco 94122 415-753-8483. Long Beach ACE, 1667 E. Plymouth St, Long Beach 90805 213-423-2758. San Diego ACE, PO Box 203076, San Diego 92120 619-224-8975. Santa Maria/Lompac ACE, 608 N. Pierce, Santa Maria 93454 805-925-9390.

CONNECTICUT: AUG of Greater Hartford, 503-B East Center St, Manchester 06040.

FLORIDA: Atari Boosters League East, P.O. Box 1172, Winter Park 32790.

ILLINOIS: Central Illinois Atari Users Group, 1920 East Croxton Ave, Bloomington 61701-5702 309-828-4661. Lake County ACE, PO Box 8788, Waukegan 60079 312-623-9567.

INDIANA: Atari Lovers of Illiana Equaled by None, PO Box 2953, Gary 46403 219-663-5117. LCC/ST, Karl Werner, Eli Lilly Corp Cntr, Indianapolis 46285 317-276-3020.

IOWA: Midwest Atari Group-Iowa Chapter, PO Box 1982, Ames IA 50010 515-232-1252.

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KENTUCKY: Atari Exchange of Louisville, PO Box 34183, Louisville 40232.

MARYLAND: Nameless AUG, 3475 Manassas Ct, Davidsonville 21035 301-798-0566.

MASSACHUSETTS: Acton-Boxborough Atari Computer Users Society, PO Box 1523, Westford 01886 617-937-8046.

MICHIGAN: Michigan Atari General Information Conference, 28111 Imperial Dr, Box M, Warren 48093-4281 313-978-8432.

MISSOURI: ACE St Louis, PO Box 6783, St. Louis, MO 63144. Warrensburg/Whiteman Atari Computer Owners, PO Box 199, Warrensburg 64093 816-747-2543.

NEW YORK: Atari Computer Owners of Rochester NY, PO Box 23676, Rochester 14692 716-334-5820. Rockland Atari Computer Users Group, 29 Riverglen Dr., Thiells, NY 10984 914-429-5283.

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VIRGINIA: Greater Richmond Atari Support Program, 1420 Yale Ave, Richmond 23224 804-233-6155. Southside Tidewater Atari Tech Users Society, 5245 Shenstone Circle, VA Beach 23455 804-464-2100.

WASHINGTON: Seattle Puget Sound ACE, PO Box 110576, Tacoma 98411-0576.

WISCONSIN: Packerland Atari Computer Users Society, 339 S. Maple St, Kimberly 54136 414-788-1058.

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